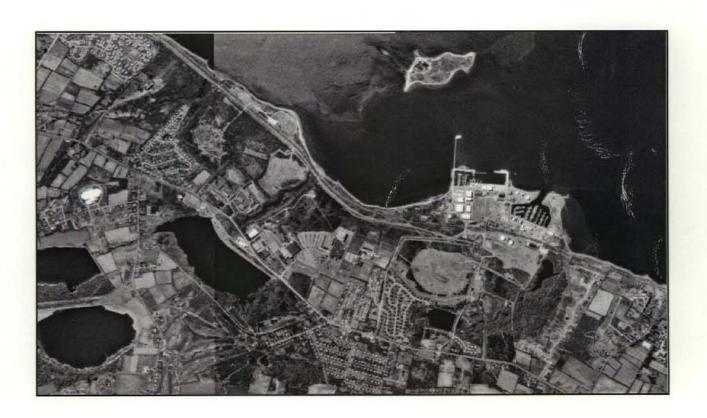




976

# Tank Farms 1-5 and Carr Point WETLAND SURVEY REPORT



Naval Station Newport Newport, Rhode Island

# Acronyms and Abbreviations

| CWA          | Clean Water Act                                |
|--------------|--|
| CFR          | Code of Federal Regulations                    |
| EA           | Environmental Assessment                       |
| EPA          | Environmental Protection Agency                |
| INRMP        | Integrated Natural Resources Management Plan   |
| NEHSTC       | New England Hydric Soils Technical Committee   |
| NOAA         | National Oceanic and Atmospheric Association   |
| NWI          | National Wetlands Inventory                    |
| <b>OHWM</b>  | Ordinary high water mark                       |
| RIDEM        | Rhode Island Dept. of Environmental Management |
| RIWRB        | Rhode Island Water Resources Board             |
| TEC          | The Environmental Company, Inc.                |
| TF           | Tank Farm                                      |
| USACE        | U.S. Army Corps of Engineers                   |
| USDA         | U.S. Department of Agriculture                 |
| <b>USFWS</b> | U.S. Fish and Wildlife Service                 |
| USGS         | U.S. Geological Survey                         |

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# CHAPTER 1 INTRODUCTION

### 1.1 INTRODUCTION

This report has been prepared to present the findings of a field survey to investigate and delineate waters of the U.S. at Tank Farms (TFs) 1-5 and Carr Point, Navy facilities that are part of Naval Station Newport, RI. Jurisdictional waters of the U.S. are defined as wetlands or other waters of the U.S. subject to U.S. Army Corps of Engineers (USACE) jurisdiction under Section 404 of the Clean Water Act (Title 33 United States Code). The investigation was conducted on October 19-20 and November 15-21, 2002 by The Environmental Company, Inc (TEC).

# 1.1.1 Location

Naval Station Newport and the TFs are located along Defense Highway (Burma Road) adjacent to the cities of Newport and Middletown, RI and Narragansett Bay (Figure 1-1).

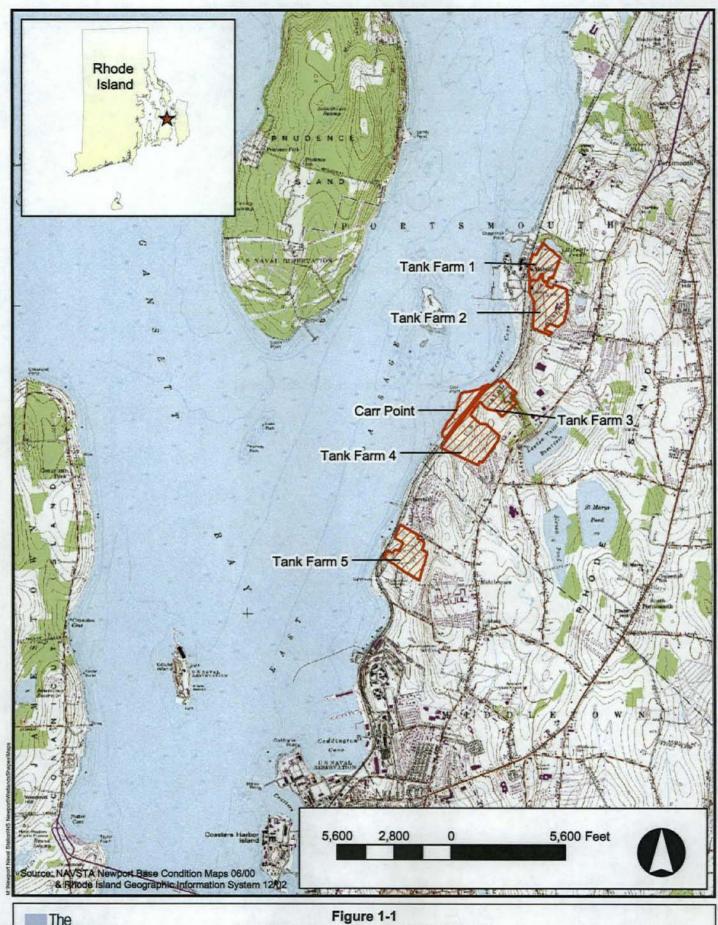
# 1.1.2 Background

The areas investigated included five closed fuel TFs on Naval Station property and the Carr Point Recreation Area. This investigation is to support an Environmental Assessment (EA) and any wetland permits for a golf course that may occupy all or parts of TFs 1-4 and Carr Point. TF-5 may be used to relocate the Carr Point recreation facilities.

This report documents the fieldwork performed and identifies the locations and characteristics of wetlands and other waters of the U.S. and their boundaries. Additionally, information within this report is intended for use in support of a Section 404 permit application to the USACE for impacts to wetlands and other waters of the U.S., if required. Additional resource areas identified include perimeter wetlands, riverbank wetlands, and flowing and standing water wetlands, as defined under State of Rhode Island Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (RIDEM 1998).

Section 2 of this report describes the criteria by which identification of wetlands were facilitated. Section 3 describes the specific methodology used in the field investigation. Section 4 of this report provides results and summary and conclusions. Section 5 provides the references. Section 6 provides the names of report preparers.





The Environmental Company, Inc.

Figure 1-1 Location of Tank Farms and Carr Point Naval Station Newport, RI



# **CHAPTER 2**

# WATERS OF THE U.S. IDENTIFICATION CRITERIA

# 2.1 JURISDICTIONAL WATERS OF THE U.S.

The Clean Water Act (CWA) of 1972 is the primary federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. The primary objective of the CWA is to restore and maintain the integrity of the nation's waters. Jurisdictional waters of the U.S. include essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, lakes, and all impoundments of these waters. In addition, wetlands and other special aquatic sites adjacent to jurisdictional waters of the U.S. are also considered jurisdictional waters of the U.S. and are included in the definition under 33 Code of Federal Regulations (CFR) 328.3(a) (1-07). Special aquatic sites are identified by the Environmental Protection Agency (EPA) in 40 CFR Part 230, Section 404(b)(1). The USACE makes decisions on which waters of the U.S. are jurisdictional.

### 2.1.1 Wetlands

As defined in the 1987 Corps of Engineers Wetland Delineation Manual or 1987 Manual, wetlands are, "...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987). The USACE defines normal circumstances as, "...soil and hydrologic conditions that are normally present, without regard to whether the vegetation has been removed." Additionally, wetlands may be inundated to a depth less than 6.6 feet and with rooted emergent vegetation or woody plant species (USACE 1987).

# 2.1.1.1 Wetland Identification Criteria

Wetlands are identified based on three criteria set forth by the USACE in the 1987 Manual. For an area to be considered a wetland, it must possess hydrophytic vegetation, hydrology, and hydric soil. Specifically, a potential wetland area must: 1) under normal circumstances support a prevalence of hydrophytic vegetation, 2) be inundated or saturated with surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions, and 3) have a predominance of hydric soil. All three criteria must be present for an area to be identified as a wetland (USACE 1987).

# 2.1.2 Drainages

The determination that a drainage is a water of the U.S. is based primarily on the presence of an ordinary high water mark (OHWM). The OHWM is defined in 33 CFR 328.3 as follows:

... that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

# Other considerations are:

- presence of channel sinuosity;
- undercutting of shrub or tree roots;
- presence of debris jams (twigs, logs, and/or small rocks);

- · presence of sediment deposition;
- · water flow (perennial or intermittent); and
- · notation of the stream as such on a U.S. Geological Survey (USGS) map.

Drainages can be placed into one of three classifications: 1) ephemeral (fleeting flow in response to storm water runoff), 2) intermittent (seasonal flow), or 3) perennial (year round flow).

# 2.2 RHODE ISLAND WETLAND CRITERIA

Rhode Island has Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (RIDEM 1998). These rules and regulations protect vegetated wetlands and other waters of the U.S., similar to the Clean Water Act protections, although the specific definitions vary. In addition, other wetland areas are protected. The comprehensive definition is as follows:

Freshwater Wetland - A bog, pond, marsh, swamp, area of land within fifty feet (50') of the aforementioned wetland types, flood plain, river bank, river, area(s) subject to flooding, area(s) subject to storm flowage, floodway, flowing body of water, stream, intermittent stream, perimeter wetland, submergent and emergent plant communities, special aquatic sites, and shrub and forested wetland.

Riverbank and perimeter wetlands included in the definition above are defined as follows:

Riverbank Wetland – "that area of land within two hundred feet (200') of the edge of any flowing body of water having a width of ten feet (10') or more, and that area of land within one hundred feet (100') of the edge of any flowing body of water having a width of less than ten feet (10') during normal flow."

Perimeter Wetland – "means a freshwater wetland consisting of the area of land within fifty feet (50') of the edge of any bog, marsh, swamp, or pond as defined by these Rules. For purposes of identification, this area shall be measured horizontally, without regard for topography, from the edge of any bog, marsh, swamp, pond, or wetland complex containing any combination of these wetland types."

# 2.3 WETLAND AND DEEPWATER AQUATIC HABITAT CLASSIFICATION

Wetlands and deepwater aquatic habitats are classified in a hierarchical system developed for the U.S. Fish and Wildlife Service (USFWS) by Cowardin et al. (1979). For an area to be a wetland, the USFWS only requires that one of the three wetland criteria be present, unlike the USACE which require that all three criteria be present. Therefore, areas designated as wetlands by the USFWS might not be considered jurisdictional wetlands by the USACE. The USFWS system recognizes four major hierarchies of classification (Ecological System, Ecological Subsystem, Class, and Subclass) and includes several modifying terms to further refine the classification. Brief descriptions of each of the systems are summarized here from Cowardin et. al. (1979). Palustrine wetland systems include all non-tidal wetlands dominated by trees, shrubs, persistent and non-persistent emergent vegetation, mosses, and lichens and are commonly referred to as marshes, swamps, bogs, fens, and ponds. Estuarine wetlands include tidal wetlands that are usually partly enclosed by land but have some access to the open ocean and contain ocean water that is at least partly diluted by freshwater runoff. Riverine wetland systems are generally contained within a channel which at least periodically contains moving water or forms a connecting link between two bodies of standing water.

# **CHAPTER 3**

# WETLAND IDENTIFICATION METHODOLOGY

# 3.1 REVIEW OF EXISTING INFORMATION

Prior to the wetlands survey, existing data from a variety of sources were used to help identify any potential wetlands or jurisdictional drainages within the survey area. Sources included:

- Letter report by Mr. Walter Hewitson describing wetland delineations in connection with a proposed sewer line (Hewitson 1993);
- Letter report to Weston and Sampson Engineers, Inc. by Lycott Environmental Research, Inc
  describing wetland delineations in connection with a proposed sewer line (Lycott 1994).
- CAD files produced for the Upgrade/Improvements to Sanitary Sewer System and construction of a bike path along Defense Highway, undated.
- CAD files for a wetland delineation in connection with the closure of TF 4 completed by Foster Wheeler Corporation, 1996.
- Letter reports to Fuss & O'Neill Inc. by Natural Resource Services Inc. describing wetland delineations at Naval Station Newport (NRS 1997; NRS 1998);
- Naval Station Newport Integrated Natural Resources Management Plan (Berger 2001), which includes USFWS NWI mapping and State of Rhode Island wetland and marine habitat mapping for the Narragansett Bay Project;
- Soil Survey of Rhode Island (USDA 1981); and
- Digital orthophoto for Newport, RI flown April 1997.

# 3.1.1 Soil Survey

The Rhode Island Soil Survey was reviewed to determine the soil types in the areas being investigated. In general, soils in the vicinity are glacial deposits of till and outwash. However, soils are thin in the region. Rock observed in the area during delineations for this project appears to be primarily phyllite, a partially metamorphosed shale. Specific mapped soil types are provided below for the wetland areas. Descriptions of the soil types from the INRMP (Berger 2001) are provided following the list.

- TF5 (Gomes Brook) Primarily PmA, NeB in the northwest portion of the TF;
- TF4 (Normans Brook) Primarily Se, NeB in a small finger away from Normans Brook towards tank #41;
- TF4 North PmA in L shaped pattern about 700' on each side near Defense Highway and surrounded by NeB;
- TF3 (Lawton Brook) NeB;
- Central Part of all TFs UD (udorthents, fill materials); and
- Carr Point MmA.

Merrimac Sandy Loam (MmA)

Slopes up to 3%, somewhat excessively drained, permeability moderately rapid.

Newport silt loam (NeB)

Slopes 3-8 %, well drained, permeability moderate or moderately rapid in surface and slow or very slow in substratum.

Pittstown silt loam (PmA)

Slopes up to 3%, moderately well drained, permeability moderate in surface and slow in substratum, high seasonal water table.

Stissing silt loam (Se)

Slopes up to 3% but often nearly level, poorly drained, permeability moderate in surface and slow in substratum, high seasonal water table. A recognized hydric soil in Rhode Island (USDA 1981; USDA 1996).

# 3.1.2 NWI Mapping

Wetlands mapped by the USFWS National Wetland Inventory (NWI) in the project area using the Cowardin et. al. system, as shown in the Station INRMP (Berger 2001), depict the following:

- TF5 (Gomes Brook) Palustrine scrub-shrub, temporarily flooded (PSSA);
- TF4 (Normans Brook)—Palustrine scrub-shrub, temporarily flooded (PSSA);
- TF4 North Palustrine scrub-shrub, temporarily flooded (PSSA);
- TF3 (Lawton Brook) Palustrine, forested, saturated (PFOB);
- TF1 and TF2 None; and
- Carr Point None.

# 3.1.3 Previous Wetland Surveys

Previous wetland delineations have been completed in various areas of the TFs for various projects. In connection with a major sewer system upgrade and construction of a bicycle path, wetland delineations were performed along Defense Highway throughout the area of the TFs in 1993 by Walter Hewitson in accordance with Rhode Island Department of Environmental Management (RIDEM) criteria (Hewitson 1993) with supplemental work in 1994 by Lycott Environmental Research, Inc. (Lycott 1994), in accordance with USACE criteria.

In connection with construction of a bicycle path and for other purposes, wetland delineations of all areas on TFs 1-5 were delineated in 1997 and 1998 by NRS (1997; 1998) with site drawings prepared by Fuss & O'Neill, as shown in the Station INRMP (Berger 2001). These delineations were completed in accordance with RIDEM criteria.

### 3.2 USACE WETLAND CRITERIA

Wetland delineations were conducted by TEC on October 19-20 and November 15-21, 2002. When potential wetlands were identified, a formal delineation was performed in accordance with criteria outlined in the USACE Wetland Delineation Manual (USACE 1987), best professional judgment, and site conditions present during the field analysis. The New England Wetland Delineation Data Sheet and Supplemental Information were also used in this delineation (USACE 2002).

All areas were investigated using the routine determination method. The routine determination method for such areas requires an initial site observation to determine plant community boundaries and a general

record of all three parameters at these community transition points. All areas were delineated using the routine method for areas less than or equal to five acres (USACE 1987).

In general, an observation point (plot) was established in each vegetation community near the point of transition from wetland to upland. A plot is defined as an area of indefinite shape, approximately 100-1,000 square feet in size, depending on the type of vegetation, that characterizes a certain plant community. A plot will generally be located near the boundary of a suspected wetland area. Detailed observations were recorded on the field data forms. USACE New England District data forms used to document each plot are included as Appendix A. In many cases one plot was established on each side of the boundary, however, if a boundary was clearly marked by topography or hydrophytic vegetation, only one plot may have been used, and in some cases with clear demarcations no plot was established. Once the boundary was established near the plot, additional observations were made in other areas around a particular wetland to establish a boundary. Wetland boundaries were then marked with a series of sequentially numbered plastic flags tied onto trees, shrubs, and/or plants or staked into the ground using flagging.

Methods used to determine the presence or absence of each technical criterion are described below.

# 3.2.1 Hydrophytic Vegetation

To determine whether hydrophytic vegetation is prevalent in an area, the dominant plant species were identified around the area where the plot was established. Plants were identified using Gleason and Cronquist (1991). Nomenclature is from Gould et al (1998). For this report, qualitative data on plants were collected in accordance with USACE New England District criteria. For each plot evaluated a percent cover or other dominance factor was estimated for all plants and listed on field forms. These values are total aerial cover for the general area surrounding a plot using a radius of approximately five feet for herbs and ground cover, a radius of approximately 15 feet for saplings and shrubs, and a radius of approximately 30 feet for trees and vines. All these were subject to site-specific considerations.

Dominant plants were determined using the USACE 50/20 Rule on relative percent cover (USACE 1987). A plant community dominated by species with an indicator status code of OBL (Obligate Wetland), FACW (Facultative Wetland), and/or FAC (Facultative) (except FAC- which indicates species not typically adapted to anaerobic soil conditions) meet the criteria for hydrophytic vegetation. The wetland indicator status of plants was assigned using the 1988 USFWS list of wetland plants for the northeast U.S. (USFWS 1988).

# 3.2.2 Wetland Hydrology

To determine whether an area has wetland hydrology, test pits and other representative areas are examined for inundation, soil saturation, a shallow groundwater table, and other hydrologic indicators. Areas that are seasonally inundated and/or saturated to the surface for a consecutive number of days equal to or more than five percent of the growing season meet the criteria for wetland hydrology. The growing season in Rhode Island, using a surrogate of air temperature above 28 degrees F in an average year, or five out of 10 years, as reported in the county soil survey report (USDA 1981), is 176 days. Thus, areas must be inundated/saturated for a minimum of nine days per year. Seasonal changes in groundwater levels and the immediacy of precipitation events must also be evaluated. If wetland hydrology is not present at the time of the site visit, saturation or inundation during the growing season can be inferred from the presence of, but not limited to one of the following primary hydrologic indicators:

watermarks on vegetation;

- · drift lines;
- sediment deposits; and
- wetland drainage patterns.

Secondary indicators include the following:

- · oxidized rhizospheres (oxidized root channels) within the upper 12 inches; and
- water-stained leaves.

# 3.2.3 Hydric Soils

To evaluate the specific characteristics of the soils, test pits were dug within a plot, and the soil color and other characteristics were examined and recorded on USACE data forms. Additional test pits or soil probes between plots and around the perimeter of the wetland were examined to finalize a boundary. Soil colors were used to determine hydric soils. The chroma of a soil was determined using Munsell color charts, which uses an alphanumeric classification system to describe colors (Gretag Macbeth 2000).

Specific hydric soil indicators for New England (NEHSTC 1998) were used if it was deemed to apply to the specific site. General soil color characteristics used to define hydric soils (USACE 1987) were considered; these definitions are as follows: 1) gleyed or low chroma colors - soil with gley colors or soils with a chroma of 1, indicating mineral soils that have been saturated or inundated by water for all or substantial periods of the growing season; or 2) low chroma in combination with redoximorphic features (e.g. mottles) - brightly colored redoximorphic features in soil with a low chroma matrix (2 or less), indicating seasonally saturated or inundated wetlands with fluctuating water levels. Additional information concerning the hydric characteristics of soil as described in Vepraskis (1995) were also considered.

# 3.3 RIDEM WETLAND CRITERIA

Perimeter wetlands were mapped using a setback of 50 feet from all USACE defined wetland boundaries on U.S. Navy property.

Riverbank wetland edges were mapped using the setbacks from flowing bodies of water specified by RIDEM regulations (RIDEM 1998). Setbacks were based on the average width of streams within a given TF.

# 3.4 DRAINAGE CRITERIA

Drainages were identified and mapped using the OHWM. Widths of drainage channels were measured, generally every 50-100 feet, and these measurements were used to determine an average width for a longer segment. The average widths were then used in preparing the figures in this report and for purposes of calculating acreages of these waters of the U.S.

# 3.5 FLAGGING OF DELINEATED AREAS

All areas delineated were flagged in the field with numbered points and locations were recorded with submeter GPS accuracy using a Trimble Pro XR GPS with Asset Surveyor.

# CHAPTER 4 FINDINGS

### 4.1 SITE CONDITIONS

Much of the project area surveyed can be characterized as highly disturbed. Forests no longer cover most of these sites. Vegetation at the TF sites was regularly maintained until they were closed, approximately 5 to 10 years ago. Since that time, no maintenance has occurred and there has been additional site disturbance during remediation at TF4 and TF5. Invasive plant species occupy large areas within each TF, but are particularly high in frequency at the perimeter of wetlands where moisture is abundant. These areas are completely or nearly completely dominated by multiflora rose (Rosa multiflora), oriental bittersweet (Celastrus orbiculatus), non-native honeysuckle (Lonicera sp.), and non-native autumn olive (Elaeagnus umbellata).

The fenced areas of the TFs and Carr Point were surveyed for Waters of the U.S. Due to the overgrown nature of these sites, not all areas could be directly inspected. All available wetland mapping and information sources for these areas, as listed in Section 3.1, were evaluated to determine if there was the potential for wetlands to occur. Based on this information, all areas with the potential for wetlands to occur were directly inspected.

Rhode Island has been under a drought "watch" or "warning" phase since February of 2002 (RIWRB 2002). However, according to NOAA (2002), rainfall from May to October 2002 was close to normal for the entire southern New England area. NOAA reports that precipitation totals tended to be above normal from November with Newport, RI reporting 5.01 inches for the month. On November 13, during the wetland delineation field work, a significant amount of rain fell. This resulted in saturated or nearly saturated soils in all areas in or near wetlands.

# 4.2 PROJECT AREA RESULTS

Maps showing all jurisdictional wetlands and waters of the U.S. delineated by TEC within the TFs and at Carr Point are shown in Figures 4-1 through 4-6. Table 4-1 lists acreages of all the wetlands and waters delineated on the sites within the facility fencelines. Waters of the U.S. between the true facility boundary and fencelines were not delineated nor accounted for in the acreages listed.

For purposes of the following discussion, waters of the U.S. are referenced separately from wetlands for ease of discussion. It is understood that wetlands are a category of waters of the U.S. All field data forms are provided in Appendix A. Photographs of the sites are provided in Appendix B. Widths of defined segments of streams or drainages that that were used to calculate acreages of waters of the U.S. are provided in Appendix C. Each defined stream or drainage segment width in Appendix C is the average of multiple field measurements.

# 4.2.1 Tank Farm 5, Gomes Brook

Gomes Brook runs from southeast to northwest along the edge of the site. As it approaches the northwest boundary of the site it goes under a large dam that apparently functioned as a roadway at one time.

# 4.2.1.1 Wetlands

Wetlands are not continuous along Gomes Brook due to natural and man-made conditions. To the southeast and upstream, Gomes Brook enters the facility outside the fenceline. Bordering this area of the stream is wetland GB-WET-1 (Figure 4-1). Two wetland plots were established in this wetland. This

wetland is a broad, flat area with cattail marsh dominated by Typha latifolia, and with the wetland edge to the southwest dominated northern arrowwood (Viburnum dentatum var. lucidum) poison ivy (Toxicodendron radicans), and red maple (Acer rubrum). At the upland-wetland boundary is a stand of Norway spruce. Wetland drainage patterns were evident near the wetland boundary. Soils at the boundary of this wetland did not show strong hydric indicators due to the presence of abundant, shallow decaying phyllite rock fragments that strongly influence the soil color and other properties. Soils in the wetland were mapped part NeB (near the stream) and part PmA (away from the stream).

Table 4-1. Wetlands and Other Waters of the U.S. on Tank Farms 1-5 and Carr Point

| Water of the U.S. Name | Acreage | Type, USFWS Classification, Notes       |
|------------------------|---------|---|
| Tank Farm 5            |         | CONTRACTOR STATE OF STATE OF            |
| GB-WET-1               | 0.647   | Wetland, PEME, PSSE                     |
| GB-WET-2               | 0.064   | Wetland, PEME, PSSE                     |
| GB-WET-3               | 2.00    | Wetland, PEMB, PEME, PSSE               |
| GB-WET-4               | 0.447   | Wetland, PSSE                           |
| GB-WATER-1             | 0.127   | Drainage, perennial                     |
| GB-WATER-2             | 0.008   | Drainage, intermittent                  |
| GB-WATER-3             | 0.014   | Drainage, intermittent                  |
| TF5c-WET-1             | 0.242   | Wetland, PEMCx; isolated wetland        |
| TF5c-WET-2             | 0.110   | Wetland, PEMEx; isolated wetland        |
| TF5c-WET-3             | 0.014   | Wetland, PEMEx; isolated wetland        |
| Subtotal               | 3.673   |   |
| Tank Farm 4            |         |   |
| TF4c-WET-1             | 1.44    | Wetland, PEMCx                          |
| TF4c-WET-2             | 0.065   | Wetland, PEMEx; isolated wetland        |
| NB-WET-1               | 2.79    | Wetland, PEME, PSSE                     |
| NB-WATER-1             | 0.191   | Drainage, perennial                     |
| NB-WATER-2             | 0.013   | Drainage, intermittent                  |
| NB-WATER-3             | 0.181   | Drainage, ephemeral, possibly excavated |
| NB-WATER-4             | 0.008   | Drainage, ephemeral                     |
| TF4n-WET-1             | 7.91    | Wetland, PSSE                           |
| TF4n-WATER-1           | 0.026   | Drainage, intermittent                  |
| TF4n-WATER-2           | 0.027   | Drainage, ephemeral                     |
| Subtotal               | 12.651  |   |
| Tank Farm 3            |         |   |
| LB-WET-1               | 4.99    | Wetland, PEMB, PSSB                     |
| LB-WATER-1             | 0.223   | Drainage, perennial                     |
| Subtotal               | 5.213   |   |
| Carr Point             |         |   |
| CP-WET-1               | 0.441   | Wetland, PEME                           |
| CP-WET-2               | 0.099   | Wetland, PSSE                           |
| CP-WET-3               | 0.036   | Wetland, PSSE                           |
| Subtotal               | 0.576   |   |
| Grand Total            | 22.113  |   |

Notes: P-palustrine, EM-emergent, SS-scrub/shrub, B-saturated, C-seasonally flooded, E-seasonally flooded/saturated, x-excavated.

Moving downstream, the next wetland (GB-WET-2) is a small wetland on the northeast side of the channel of Gomes Brook with a clear topographic boundary at the toe of the slope (Figure 4-1). No delineation data forms were prepared specifically for this small area. This wetland appears to obtain some water from bank seepage. The wetland is part emergent, containing buttercup (Ranuculus sp.; not identified to species due to lack of flowers or fruit) and sensitive fern (Onoclea sensibilis), and part scrubshrub with northern arrowwood, multiflora rose (Rosa multiflora), and poison ivy. Soils were clearly hydric in this wetland and are mapped NeB in this wetland. Downstream of this wetland appears to be the remnants of an old dam. Currently there are numerous concrete pipes that channel water through the area and a small drop in the stream bed of about 10 feet.

Further downstream is GB-WET-3 (Figure 4-1). This wetland occurs along both sides of Gomes Brook and incorporates parts of two drainages that enter from the northeast. A total of four plots were established in this wetland, two on either side of the channel, to collect data for delineation data forms. On the northeast side of the channel was a combination of emergent and scrub-shrub wetlands. Emergent wetland areas appear to be at least partially fed by seepage from banks. These areas were dominated by the unidentified buttercup seen abundantly along Gomes Brook, water cress (Rorippa nasturtium-aquaticum), mint (Mentha sp.), skunk cabbage (Symplocarpus foetidus), with marsh rose (Rosa palustrus), multiflora rose, and northern arrowwood on the edges. Scrub-shrub areas were typically dominated by northern arrowwood, pussy willow (Salix discolor), with multiflora rose the dominant plant near the wetland boundaries. The hydrology of these areas appeared to be influenced primarily by Gomes Brook and the two smaller drainages entering it. The drainage furthest west was braided and scrub-shrub wetland occurred throughout the braided area. Soils on the northeast side of the channel were generally clearly hydric, although some areas of shallow phyllite masked the hydric characteristic. Soils were mapped PmA near the channel and NeB further out from the channel.

On the southwest side of Gomes Brook in wetland GB-WET-3, scrub-shrub wetlands along the channel were similar to those across the channel. There is also a large "arm" of wetland that extends out away from the channel on this side. It is flat with very shallow slope, extending to, and not clearly defined at the floodplain along Gomes Brook. The hydrology source for this wetland may be shallow groundwater. This wetland is a mix of emergent and scrub-shrub wetland, although predominantly scrub-shrub. Dominant vegetation in this area was sensitive fern, marsh fern (*Thelypteris palustris*), poison ivy, and northern arrowwood. Near the intersection of this arm and the floodplain boundary horsetail (*Equisetum* sp.) was abundant. Soils in this wetland arm are similar to the soil description for the mapped PmA soils in this area (USDA 1981) with redox concentrations immediately below the A horizon. The redox concentrations were somewhat sporadic in soils of this area, but the strongly hydrophytic vegetation indicated that this area should be delineated as a wetland.

Moving downstream below the major dam on Gomes Brook is wetland GB-WET-4 (Figure 4-1). In this area the wetland boundaries are clearly demarcated by the topography and vegetation. No delineation data forms were prepared specifically for this area. Vegetation included the unidentified buttercup, bristly dewberry (Rubus hispidis), rough goldenrod (Solidago rugosa), elderberry (Sambucus canadensis), northern arrowwood, pussy willow, weeping willow (Salix babylonica), red maple, highbush blueberry (Vaccinium corymbosum), speckled alder (Alnus incana), and multiflora rose. Soils indicated strong hydric characteristics. They were mapped PmA in this area.

# 4.2.1.2 Drainages

Gomes Brook (GB-WATER-1), a perennial stream, is the major drainage at TF5 (Figure 4-1). Two small drainages (GB-WATER-2 and GB-WATER-3), both probably intermittent, enter from the northeast and

discharge to Gomes Brook. Both of these drainages had water in them at the time of the field delineation. GB-WATER-2 is interrupted by a segment of wetland (vegetated, very shallow channel).

# 4.2.2 Tank Farm 5, Central

# 4.2.2.1 Wetlands

TF5 contains several small, isolated wetlands in the interior of the site. The interior of the site consists entirely of disturbed ground where large underground tanks were installed. Soils in and around all these wetlands contained much phyllite gravel and sometimes cobble, dominating the texture and characteristics of the soil. TF5c-WET-1, is apparently the result of soil subsidence after the implosion and filling of one of the underground tanks (Figure 4-1). This wetland contained standing water and is dominated by cattail and Canada rush (*Juncus canadensis*). Soils in and around this wetland were clearly disturbed but there did appear to be some gley color developing. TF5c-WET-2 had no standing water but had a zone of saturated soil near the surface (Figure 4-1). This wetland is in a flat area where drainage may never have been adequate or where some prior excavation may have occurred. Vegetation was dominated by soft rush and pink knotweed (*Polygonum pensylvanicum*). At one end of this wetland were shrubs dominated by northern arrowwood. Redoximorphic concentrations were present. TF5c-WET-3 is a small wetland contained within a broad swale (Figure 4-1). This swale may have been recently created during closure activities at the site. No saturated soil was observed in this area but there did appear to be wetland drainage patterns. Vegetation was dominated by soft rush and wool grass (*Scirpus cyperinus*). Redoximorphic concentrations were present.

# 4.2.2.2 Drainages

No drainages were present in the interior of TF5.

# 4.2.3 Tank Farm 4, Central and East

# 4.2.3.1 Wetlands

Wetland TF4c-WET-1 is an elongated, primarily emergent wetland, part of which may have been created or modified by excavation activities on the site (Figure 4-2). Evidence that it was partially created or modified through excavation is the well-defined bank (2-3 feet high) all along the southern edge of the wetland. The northern end of the wetland is scrub-shrub (and contains one small area of forested wetland) and appears to be a more natural wetland. Five wetland plots were established to aid in the delineation of this wetland. The source of water for this wetland appears to be primarily surface runoff. Wetland hydrology was noted primarily through wetland drainage patterns. Vegetation was dominated by soft rush, rough goldenrod, path rush (*Juncus tenuis*) and slender-leaved goldenrod (*Euthamia tenuifolia*). Soils in this wetland contained much phyllite gravel and cobble, dominating the texture and characteristics of the soil and preventing strong hydric characteristic development. Hydric characteristics may also be lacking due to recent soil disturbing activities. Soils are mapped as udorthents – urban land (UD) which consists of fill.

TF4c-WET-2 is a small wetland complex that has apparently been created by the subsidence of soils after implosion and filling of one of the tank holes (Figure 4-3). These wetlands were clearly outlined by standing water and vegetation, including soft rush and cattail. No wetland plots were established for this small wetland.

# 4.2.3.2 Drainages

Drainage NB-WATER-2 extends along the southern and eastern boundaries of TF4 and eventually discharges to Norman's Brook. This water of the U.S. is described in the following section.

# 4.2.4 Tank Farm 4, Normans Brook

# 4.2.4.1 Wetlands

Norman's Brook, in the southwest corner of TF4, has an associated wetland (NB-WET-1) that occurs on both sides of the channel (Figure 4-2). Five wetland plots were established in this wetland to collect data for delineation data forms. The source of water for these wetlands appears to be a combination of both surface water sheet flow from uplands, flooding from stream flow, and groundwater discharge. A spring is located in one area to the east of the channel, near the middle surface drainage shown in Figure 4-2. An old concrete wall is located in the area of this spring and may have been used to control or enhance its flow characteristics.

This wetland was almost exclusively a scrub-shrub wetland dominated by speckled alder, northern arrowwood, and multiflora rose, with a few small areas dominated by reed canary grass (*Phalaris arundinacea*) or giant reed (*Phragmites australis*).

Soils at the boundary of this wetland did not show strong hydric indicators due to the presence of abundant, shallow decaying phyllite rock fragments that strongly influence the soil color and other properties. Especially on the west side of the channel, on both sides of the wetland-upland boundary, soil color was a very uniform gray color (gley1 3/10Y) throughout the soil profile, including immediately beneath the O horizon. This color is apparently due to the weathering of the phyllite rock that is near the soil surface and which is abundant near all of the boundaries of this wetland. Soils in the wetland are mapped Stissing silt loam (Se), a recognized hydric soil in Rhode Island (USDA 1981; USDA 1996).

# 4.2.4.2 Drainages

Norman's Brook (NB-WATER-1), a perennial stream, is the major drainage in the southern part of TF4 (Figure 4-2). Three tributaries that enter from the east were delineated. The middle tributary, NB-WATER-2, is an intermittent drainage extending a short distance into the interior of TF4 (Figure 4-2). The channel no longer had an OHWM as it approached the wetland. No water was present in this channel at the time of the field delineation. The eastern-most tributary (NB-WATER-3), the long ephemeral drainage extending along the eastern and southern boundaries of the facility, appears to have been dug at some point, based on the observed straightness of the channel and the built-up banks and steep sides in places (Figures 4-2, 4-3). It may have been constructed when the TF was built to improve drainage from the site. No water was present in this channel at the time of the field delineation. The western-most tributary (NB-WATER-4) receives drainage from the wetland in the central part of TF4 that is described in the previous section of this report (Figure 4-2). In some places this ephemeral drainage is somewhat indistinct and the OHWM is no longer present where it approaches the wetland boundary. No water was present in this channel at the time of the field delineation.

# 4.2.5 Tank Farm 4, North

# 4.2.5.1 Wetlands

A scrub-shrub wetland at the north end of TF4 (TF4n-WET-1) occupies a large area to the northeast of the access road and extends north along the mowed corridor of Defense Highway (Figure 4-4). Eleven wetland plots were established in this wetland to collect data for delineation data forms. The source of water for this area appears to be a combination of surface drainage and groundwater seepage. An area of ponded water on adjacent property, near the north corner of TF4, is shown on the soil survey maps (USDA 1981). Throughout the interior wetland area evidence of wetland hydrology was wetland drainage patterns. In most areas along Defense Highway delineated as wetlands, soils were moist from seepage and possessed ruts from times of the year when surface soils were saturated, or at least very wet. During field work for this investigation, these soils were very moist but were not saturated within 24 inches of the surface.

Vegetation in the scrub-shrub wetland was dominated by high-bush blueberry (Vaccinium corymbosum), northern arrowwood, winterberry (Ilex verticillata) and red maple, with multiflora rose abundant on the edges. Just on the upland side of the wetland, the vegetation consisted of multiflora rose, honeysuckle, bittersweet, with a light canopy of black locust (Robinia pseudoacacia) and black cherry (Prunus serotina).

Soils in this wetland correspond well with the soil description for Newport silt loam (NeB) in the soil survey (USDA 1981). Redox concentrations were very evident in the light-colored matrix within the B horizon of this soil.

# 4.2.5.2 Drainages

One drainage (TF4n-WATER-1) was delineated which originates within wetland TF4 north (Figure 4-4). Outside the wetland it discharges to the ditch beside Defense Highway. Because it receives drainage from a wetland this drainage was delineated as a water of the U.S. beyond the wetland boundary, across Defense Highway and into Carr Point to the location where it is piped underground for discharge to Narragansett Bay.

TF4n-WATER-2 is found parallel to Defense Highway on its eastern side, then crosses under it and the railroad tracks and flows underground through pipes straight to Narragansett Bay (Figure 4-4). This ephemeral waters of the U.S. is a ditch of Defense Highway that collects drainage from surface runoff and seepage from wetland TF4n-WET-1.

# 4.2.6 Tank Farm 3

# 4.2.6.1 Wetlands

A large wetland associated with Lawton Brook (LB-WET-1) was delineated (Figure 4-5). This wetland is in the flat-bottomed basin of an old reservoir. This reservoir is shown on the soil survey map (USDA 1981) and in the figures within the base INRMP (Berger 2001), but large shrubs present within the basin indicate that it has been 10 plus years since this reservoir was drained. The wetland boundaries throughout this wetland are clearly indicated by the toe of steep slopes. Four wetland plots were established to collect data for delineation data forms. Lawton Brook splits and in some areas is a braided channel as it flows through wetlands in the flat bottom of the valley (Figure 4-5).

Vegetation within the wetland was dominated by common reed in the northwestern third of the wetland. Moving upstream the common reed dominated emergent wetland gradually shifted to a scrub-shrub wetland dominated by willows (Salix spp.) and speckled alder. Edges of the wetland also contained northern arrowwood, spicebush (Lindera benzoin), yellow birch (Betula alleghaniensis), and multiflora rose.

Soils within the wetland were gleyed or light in color near the surface with prominent redox concentrations. Soils just outside the wetland were exhibited a profile very similar to that described for

NeB soils in the soil survey (USDA 1981) or they contained large amounts of phyllite gravel and cobble near the surface.

# 4.2.6.2 Drainages

As mentioned above, Lawton Brook (LB-WATER-1) splits and is a braided channel in some areas as it flows through wetlands in the flat bottom of the valley (Figure 4-5). Water levels flowing through the channel are controlled by releases from Lawton Valley Reservoir located about a half-mile upstream of the facility boundary. During the field delineations stream flow was observed to vary widely throughout the day. After the stream channel splits into two branches, each branch was estimated as having an average channel width of four feet.

# 4.2.7 Tank Farms 1 and 2

No waters of the U.S. were delineated on TFs 1 or 2.

# 4.2.8 Carr Point

# 4.2.8.1 Wetlands

Carr Point contains several small linear wetlands. Two wetland plots were established in one wetland to collect data for delineation data forms. Wetland CP-WET-1 is an emergent wetland along a regularly mowed powerline corridor (Figure 4-6). In some areas there may previously have been some excavation or berms created along the powerline corridor because there are banks on both sides of the corridor. As a result, the limits of wetland CP-WET-1 correspond closely with the maintained powerline corridor. The source of water appears to be seepage. Although soils were not saturated within the top 20 inches, ruts present in this area indicate that soil is very wet or saturated at some times. Vegetation within the powerline is closely mowed, thus not representative of its natural state, although soft rush was typically a dominant. Just outside the mowed area of the powerline, sweet pepperbush (Clethra alnifolia), northern arrowwood, high-bush blueberry and in certain areas, small amounts of purple loosestrife (Lythrum salicaria) were present. At the upland edge were staghorn sumac (Rhus typhina) and autumn olive. Soils exhibited moderate hydric characteristics, primarily redox concentrations in the A and B horizons. Soils in the Carr Point area are mapped Merrimac sandy loam (MmA) (USDA 1981).

Wetland CP-WET-2 is a small linear wetland associated with a vegetated drainage swale at the base of the slope running partly along the edge of the powerline corridor (Figure 4-6). The upper part of this drainage swale was in a mowed grass area and the lower part was scrub-shrub dominated by northern arrowwood and pussy willow. Soils exhibited moderate hydric characteristics, primarily redox concentrations.

Wetland CP-WET-3 was small linear wetland associated with a vegetated drainage (Figure 4-6). This scrub-shrub wetland started at the edge of the powerline corridor and angled between the powerline and wetland CP-WET-2. Vegetation was dominated by northern arrowwood, pussy willow, and rough goldenrod. Soils exhibited moderate hydric characteristics, primarily redox concentrations.

A wooded scrub-shrub habitat exists beyond the northern boundary of CP-WET-2 and CP-WET-3 (defined by an access road which connects the recreation area to the powerline corridor). See Figure 4-6 for additional detail.

# 4.2.8.2 Drainages

No unvegetated drainages were delineated in this area. Note the limits of the area evaluated for waters of the U.S. on Figure 4-6. The drainage emanating from wetland TF4 north and crossing into Carr Point is discussed in Section 4.2.5 of this report.

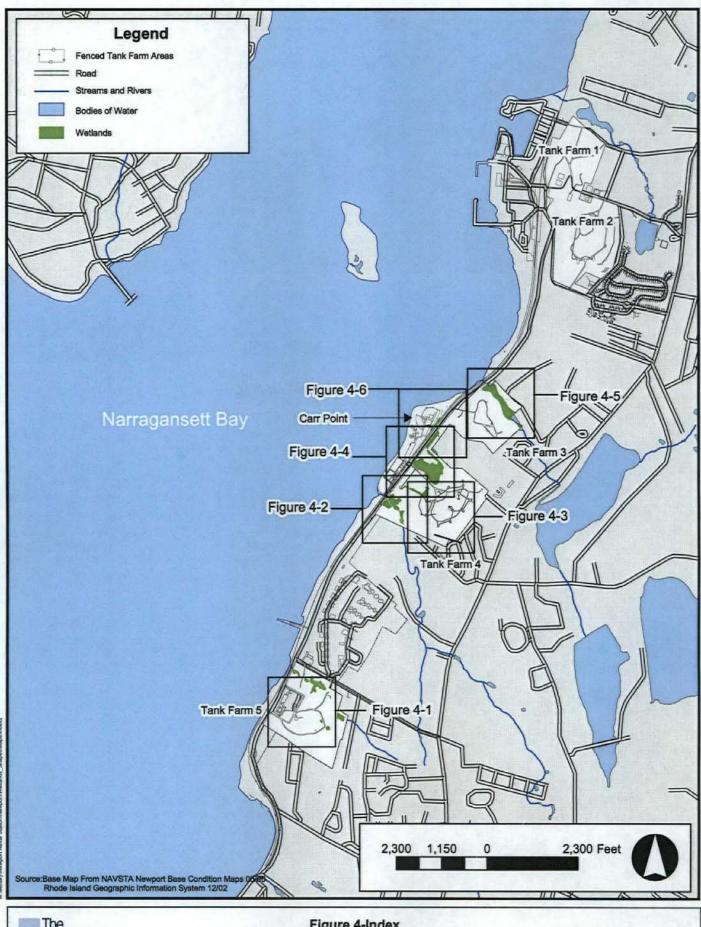
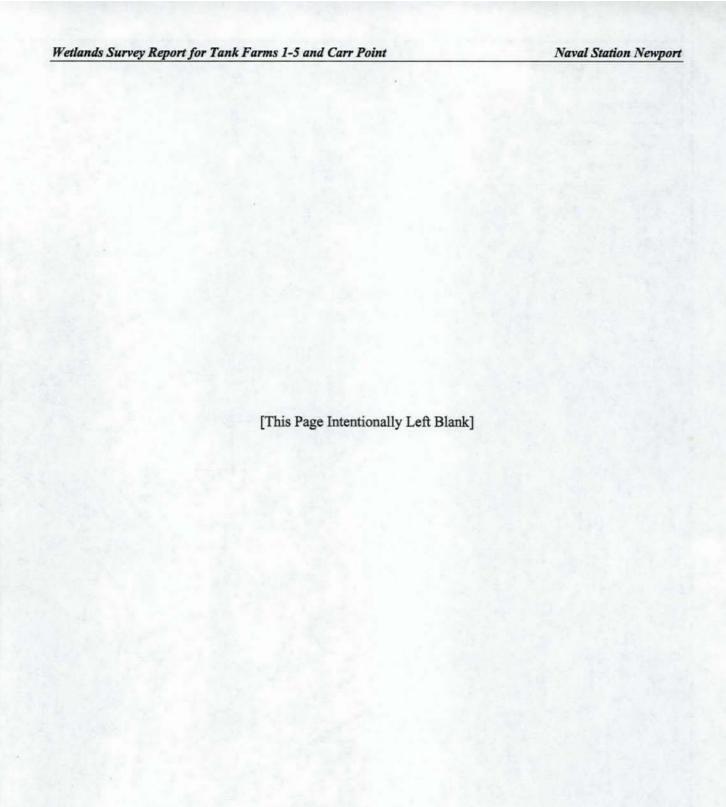
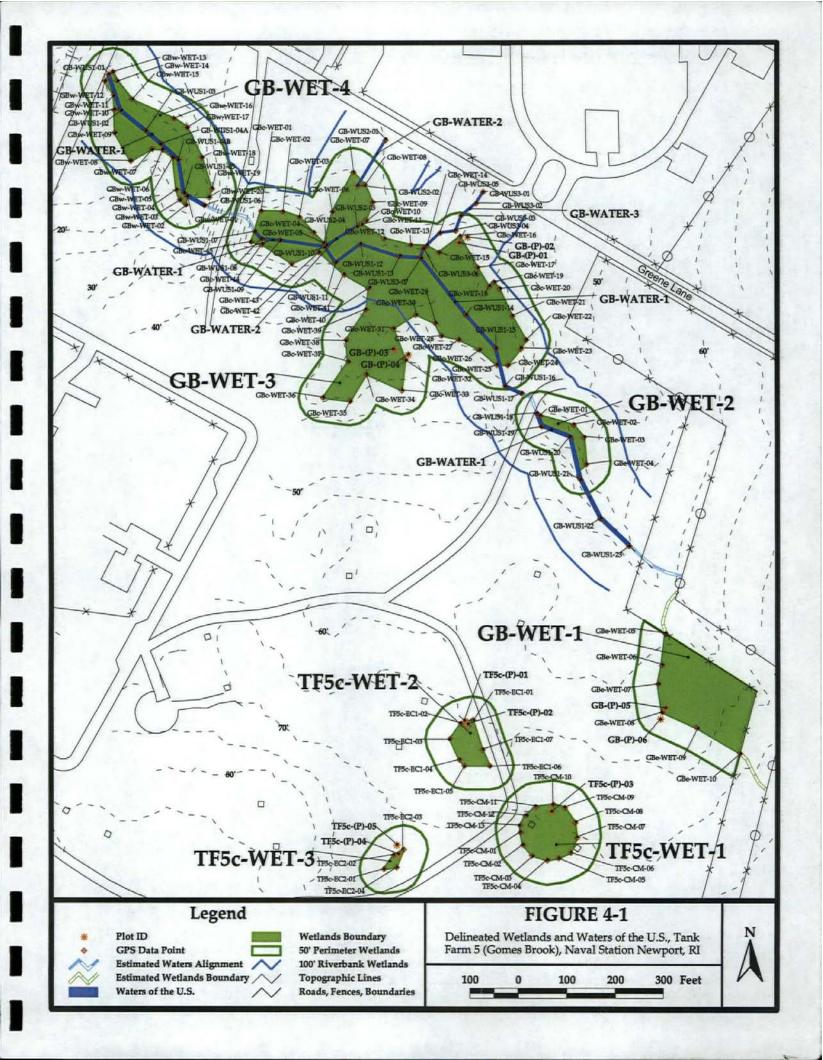




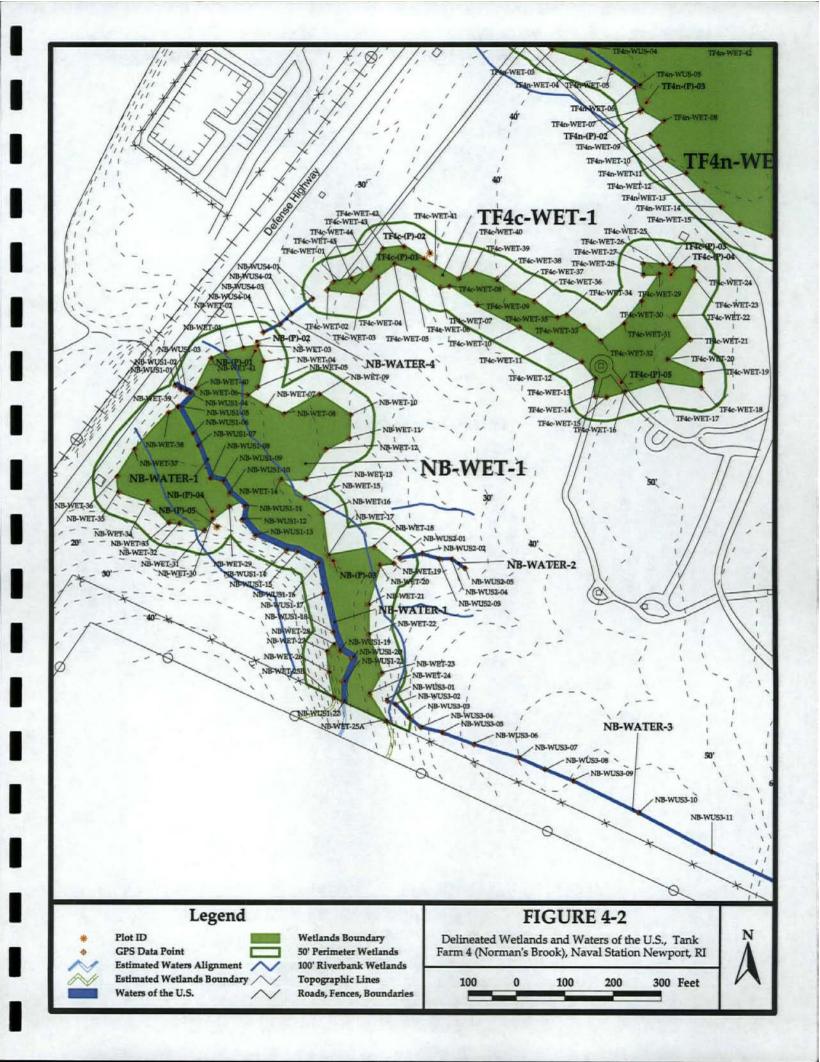
Figure 4-Index Location Map for Wetlands and Waters of the U.S., Naval Station Newport, RI



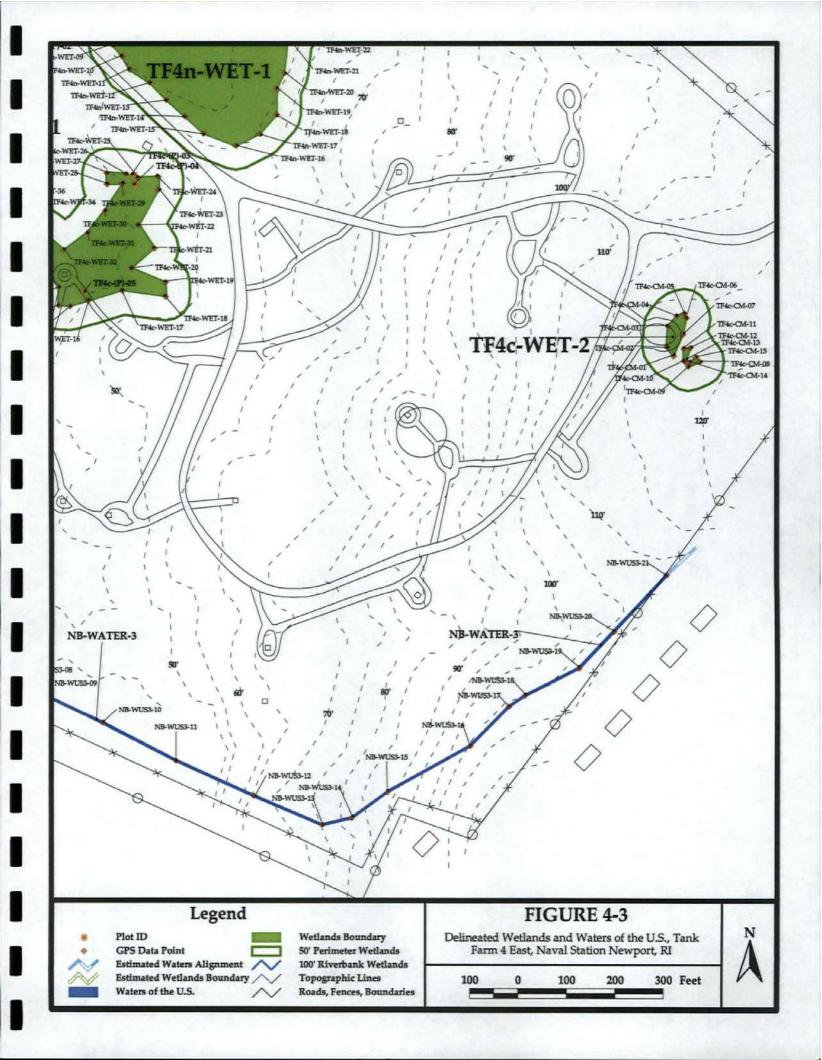




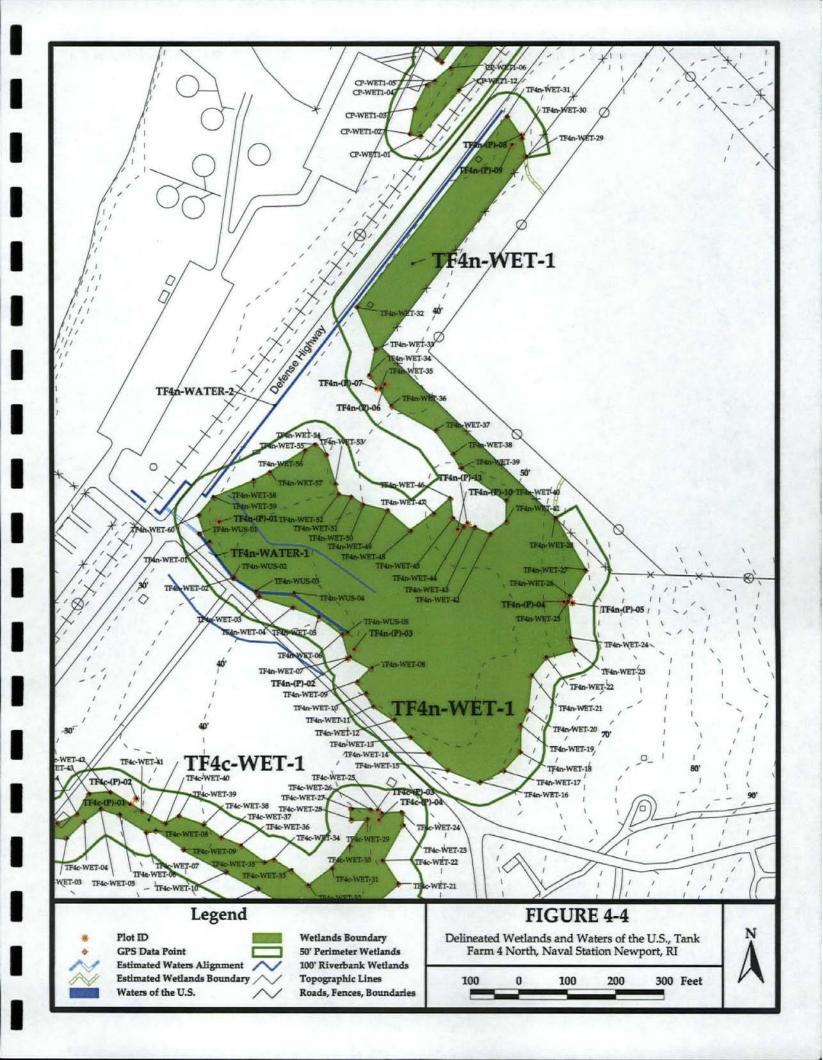




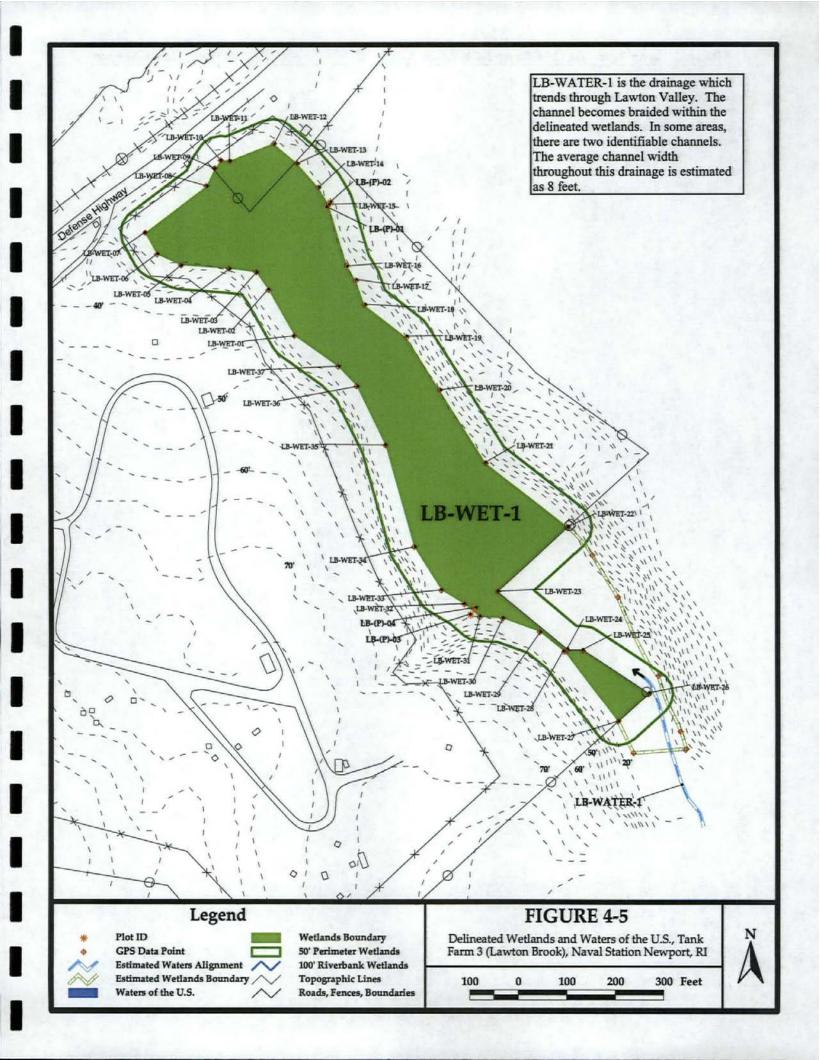






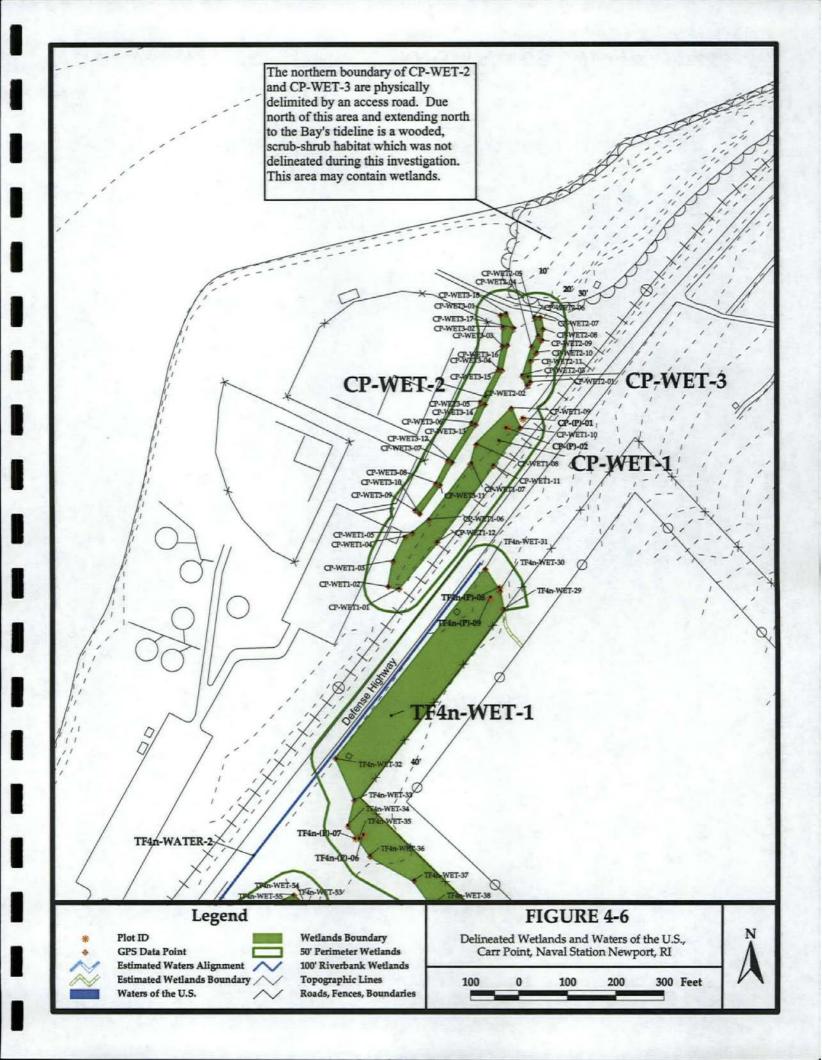


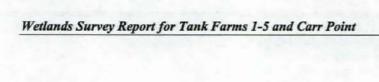












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## CHAPTER 6 PREPARERS

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Naval Station Newport

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APPENDIX A
WETLAND DATA FORMS



TRANSECT: N/A

PLOT: GB-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 13, 2002

Wetland

Location: Northside of Gomes Brook

| VEGETATION                     | THE PROPERTY OF | 0.45             |     |        |
|--------------------------------|-----------------|------------------|-----|--------|
|                                |                 |                  | D   |        |
|                                | DOMINANCE       | PERCENT          | 0   | NWI    |
| STRATUM AND SPECIES            | RATIO           | DOMINANCE        | M   | STATUS |
| Trees                          | 150/050         | 70               | 37  | FAG    |
| Acer rubrum (DBHs: 10,8,8)     | 179/358         | 50               | X   | FAC    |
| Prunus serotina (DBHs: 10,8,8) | 179/358         | 50               | X   | FACU   |
| Shrubs                         |                 |                  |     |        |
| Viburnum dentatum var. lucidum | 70/74           | 95               | X   | FACW-  |
| Lonicera morrowii              | 2/74            | 3                |     | FACU   |
| Rosa multiflora                | 2/74            | 3                |     | FACU   |
|                                |                 |                  |     |        |
|                                |                 |                  |     |        |
|                                |                 |                  |     |        |
|                                |                 |                  |     |        |
|                                |                 |                  |     |        |
| HYDROPHYTES                    | Non-Hydroph     | VTES             |     |        |
| III DKOIII I LD                | TON TITEROTTI   | ILLS             |     |        |
|                                | 0               | 1                |     |        |
| OBL FACW FAC *OTHER            | FAC-            | FACU UP          | L   |        |
| Hydrophytes Subtotal (A):2_    | Non-hydrophyte  | es Subtotal (B): | 1_  | _      |
| PERCENT HYDROPHYTES (          | 100A/A+B)· 2/3= | 57%              |     |        |
| I BRODELI III DROITI I ES (    | 2001211.Dj      | 7170             | - A |        |
| HYDROLOGY                      |                 |                  |     |        |
| ☐ RECORDED DATA                |                 |                  |     |        |

| RECORDED DATA  |  |               |                   |                   |                                    |
|--|--|---------------|-------------------|-------------------|------------------------------------|
| 0. 11  |  |               |                   |                   |                                    |
| Stream, lake, or tidal gage                                | Identification:  |               |                   |                   |                                    |
| Aerial photography   | Identification:  | Heavy rains - | - day of sampling |                   | - 1-1-6                            |
| Other  | Identification:  |               |                   |                   |                                    |
| No RECORDED DATA   |  |               |                   |                   |                                    |
| OBSERVATIONS   |  |               |                   |                   | 2844                               |
| Depth to Free Water: 13" (h                                | eavy rains day of  | sampling)     |                   |                   |                                    |
| Depth to Saturation (including Altered Hydrology (explain) | ng capillary fringe  |               |                   |                   |                                    |
| ☐ Inundated ☐ Satura upper                                 | The State of the S | Water Marks   | ☐ Drift Lines     | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| ☐ OTHER (explain):   |  |               |                   |                   |                                    |
|  |  |               |                   |                   |                                    |

| Culuminal C-  | hata afalatia        | mand DIE        | SE DE       | TOTAL T | TO APPENDIX B,                        | PHOTO #1   |
|---|----------------------|-----------------|-------------|---------|---------------------------------------|--|
| DEPTH   | HORIZON              | MATRIX<br>COLOR | RED         | OXIMO   | RPHIC FEATURES dance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0"  | 0                    |                 | 1           |         |                                       |  |
| 0-5"  | A                    | 10YR2/2         |             |         |                                       |  |
| 5-18"   | В                    | 205Y5/2         | 1           | 0YR4/4  | 4, 20%, 5-10, d                       | silt loam, granular  |
|   |                      |                 |             |         |                                       | loam, blocky   |
|   |                      |                 |             |         |                                       |  |
|   |                      |                 |             |         |                                       |  |
|   |                      |                 |             |         |                                       |  |
|   |                      |                 |             |         |                                       |  |
|   |                      |                 |             |         |                                       |  |
| HYDRIC SOIL   | INDICATOR(S):        |                 |             |         | REFERENCE(<br>NEHSTC (19              |  |
| OPTIONAL S  Taxonomic subj Soil drainage cli Depth to active NTCHS hydric | ass:<br>water table: | apped NeB       |             |         | REFERENCE(                            | s):  |
| CONCLL  | ISIONS               |                 |             |         |                                       |  |
| CONCLU  | SIUNS                |                 | YES         | No      | REMARKS:                              |  |
| Hydric veget  | ation met?           |                 | $\boxtimes$ |         |                                       |  |
| Wetland hyd   | rology met?          |                 | $\boxtimes$ |         |                                       |  |
|   | criterion met?       |                 |             |         |                                       |  |
| 100   | APOINT IN A WE       |                 |             |         |                                       |  |

TRANSECT: N/A

PLOT: GB-(P)-01

TRANSECT: N/A

PLOT: GB-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** NOV 13, 2002

Upland

Location: Northside of Gomes Brook

| DOMINANCE          | PERCENT                                | D  |   |
|--------------------|--|--|---|
| RATIO              | DOMINANCE                              | O<br>M   | NWI<br>STATUS   |
| TELL TY            |  |  |   |
| 169.6/169.6        | 100                                    | X  | FACU  |
| Tell-red           |  |  |   |
| 40/60              | 66                                     | X  | FACW-   |
| 20/60              | 33                                     |  | FACU  |
|                    |  |  |   |
|                    |  |  |   |
|                    |  |  |   |
|                    |  |  |   |
|                    |  |  |   |
|                    |  |  |   |
| - 421              |  |  |   |
| NON-HYDROPHY       | TES                                    |  |   |
| <u>0</u>           | 1 <u>0</u>                             | _  |   |
| FAC- F             | ACU UP                                 | L  |   |
| Non-hydrophyte     | s Subtotal (B):_                       | 1_   | i in  |
| 0A/A+B): $1/2 = 5$ | 0%_                                    |  |   |
|                    | Non-Hydrophyte  OFAC-F  Non-hydrophyte | 40/60       66         20/60       33             Non-Hydrophytes         0       1       0         FAC-       FACU       UP | 40/60       66       X         20/60       33             NON-HYDROPHYTES |

| HYDROLOGY  |                    |              |                     |                   |                                       |
|--|--------------------|--------------|---------------------|-------------------|---------------------------------------|
| ☐ RECORDED DATA                                      |                    |              |                     |                   |                                       |
| Stream, lake, or tidal gage                          | Identification:    | 10% (heavy 1 | rain day of fieldwo | rk)               |                                       |
| Aerial photography                                   | Identification:    |              |                     |                   |                                       |
| Other  | Identification:    |              |                     |                   |                                       |
| ☑ No Recorded Data                                   |                    |              |                     |                   |                                       |
| ○ OBSERVATIONS                                       |                    |              |                     |                   | The same of                           |
| Depth to Free Water: 10                              | " (heavy rains day | of sampling) |                     |                   | The last the same                     |
| Depth to Saturation (incl<br>Altered Hydrology (expl | ~                  | nge):        |                     |                   |                                       |
|  | turated in V       | Vater Marks  | ☐ Drift Lines       | Sediment Deposits | ☐ Drainage Patterns<br>within Wetland |
| ☐ OTHER (explain):                                   |                    |              |                     |                   |                                       |
|  |                    |              |                     |                   |                                       |
|  |                    |              |                     |                   |                                       |

| SOIL-Sketch                          | landscape posit     | tion of this p | lot. Indi        | cate rela | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|--------------------------------------|---------------------|----------------|------------------|-----------|---|--|
|                                      |                     |                |                  |           |   |  |
| Submission of pho                    | oto of plot is enco | uraged. PLE    | ASE R            | EFER      | TO APPENDIX B, PHOTO                                    | ) #2   |
| DEPTH                                | HORIZON             | MATRIX         | AND DESCRIPTIONS |           | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-8"                                 | A                   | 10YR           |                  |           |   | silty loam, granular   |
| 8-15"                                | В                   | 2.5Y           | 5/2              |           |   | silty loam, blocky   |
| E A LA CALLED                        |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
| HIMME                                |                     |                |                  |           | 7 7 7 2 2 3   |  |
|                                      | 1                   |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           | 311   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
| HYDRIC SOIL                          | INDICATOR(S):       |                |                  |           | REFERENCE(S):   |  |
|                                      |                     |                |                  |           |   |  |
|                                      |                     |                |                  |           |   |  |
| OPTIONAL SO                          | DIL DATA Ma         | ipped NeB      |                  | 100       |   |  |
| J. HOIME SC                          | THE IVE             | TPV4 INCD      |                  |           | REFERENCE(S):   |  |
| Taxonomic subgr                      |                     |                |                  |           |   | William - warring  |
| Soil drainage class                  |                     |                |                  |           |   |  |
| Depth to active w<br>NTCHS hydric so |                     |                |                  |           |   |  |
| Or is figure 8                       | January II.         |                |                  |           | The second second                                       |  |
| CONCLU                               | SIONS               |                |                  |           | C No Design   | FULL TRUBBLES, C.  |
|                                      |                     |                | YES              | No        | REMARKS:  |  |
| Hydric vegeta                        | tion met?           |                |                  | ×         |   |  |
| Wetland hydro                        |                     |                |                  |           | See description in hydrolog                             | v  |
|                                      |                     |                |                  |           | 230 accomption in nyurotog                              |  |
| Hydric soils of                      |                     | EI ANDO        |                  |           |   | Arras Hispania   |
| IS THIS DATA                         | POINT IN A WET      | ILAND!         |                  |           |   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-02

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC) DATE: Nov 14, 2002 Wetland

Location: Gomes Brook southside "arm" extending well out from GB

| VEGETATION  STRATUM AND SPECIES   | DOMINANCE<br>RATIO       | PERCENT<br>DOMINANCE   | D<br>O<br>M | NWI<br>STATUS |
|---|--------------------------|------------------------|-------------|---------------|
| Shrubs  |                          |                        |             |               |
| Toxicodendron radicans  | 40/47                    | 85                     | X           | FAC           |
| Viburnum dentatum var. lucidum  | 5/47                     | - 11                   | 159         | FACW-         |
| Lonicera morrowii   | 2/47                     | 4                      |             | FACU          |
| Herbs   |                          |                        |             |               |
| Onoclea sensibilis  | 100                      | 100                    | X           | FACW          |
|   |                          |                        |             |               |
| HYDROPHYTES  O 1 1 0 0 OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 2                                   | Non-hydrophyte           | O UP es Subtotal (B):_ |             | -35-77        |
| PERCENT HYDROPHYTES (1)   | 00A/A+B): <u>1/1 =10</u> | 0%                     |             | 1 20 57       |
| HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification:  Aerial photography Identification: |                          |                        |             |               |

| HYDROLOGY   | 7 77               | 1877               |                       |                        |                                    |
|---|--------------------|--------------------|-----------------------|------------------------|------------------------------------|
| ☐ RECORDED DATA                                       |                    |                    |                       |                        |                                    |
| Stream, lake, or tidal gage                           | Identification     |                    |                       |                        |                                    |
| Aerial photography                                    | Identification     |                    |                       |                        |                                    |
| Other   | Identification     |                    |                       |                        | 100                                |
| ☑ No Recorded Data                                    |                    |                    |                       |                        |                                    |
| ☐ OBSERVATIONS  |                    |                    |                       |                        |                                    |
| Depth to Free Water: 8"                               |                    |                    |                       |                        |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expla |                    | inge): 4"heavy     | rain previous day; sa | aturated to surface in | n some similar areas               |
|   | turated in per 12" | Water Marks        | ☐ Drift Lines         | ☐ Sediment<br>Deposits | ☐ Drainage Patterns within Wetland |
| OTHER (explain): some                                 | e weak drainage    | patterns in nearby | y similar areas (simi | lar veg.)              |                                    |
|   |                    |                    |                       |                        |                                    |
|   |                    |                    |                       |                        |                                    |
|   |                    |                    |                       | and the second         |                                    |

| SOIL-Sketch l               | andscape posi     | tion of this | olot. Indi  | cate rela | tive position of other plot(s) and   | the wetland flag if not on plan.   |  |  |
|-----------------------------|-------------------|--------------|-------------|-----------|--|--|--|--|
|                             |                   |              |             |           |  |  |  |  |
| Submission of photo         | o of plot is enco | ouraged. P   | LEASE       | REFE      | R TO APPENDIX B, PHOT  | O #3   |  |  |
| <b>D</b> EPTH               | Horizon           | MATRI        | COLOR       |           | EDOXIMORPHIC FEATURES color, abundance, size, contrast)  | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |  |  |
| 0-7"                        | A                 |              | R3/2        |           |  | silty loam, granular   |  |  |
| 7-16"                       | В                 | 2.5          | 74/2        |           | 10YR5/4, 5,5mm, f to d   | silty loam, blocky   |  |  |
|                             |                   |              |             |           | sporadically found   |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  | P. S. A. THURSTER  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
| HYDRIC SOIL IN              | DICATOR(s):       |              |             |           | REFERENCE(S):  |  |  |  |
| IIID                        | DICATOR(S).       |              |             |           | NEHSTC (1998)  |  |  |  |
|                             |                   |              |             |           |  |  |  |  |
|                             |                   |              |             |           |  | ALTO CONTRACTOR OF THE PARTY OF |  |  |
| OPTIONAL SOIL               | LDATA M           | apped Pm     | A           |           |  |  |  |  |
| Taxonomic subgrou           | ın.               |              |             |           | REFERENCE(S):  |  |  |  |
| Soil drainage class:        |                   |              |             |           |  |  |  |  |
| Depth to active wat         | er table:         |              |             |           |  |  |  |  |
| NTCHS hydric soil           | criterion:        |              |             |           |  |  |  |  |
| CONCY Y                     | TONIC .           |              |             |           |  |  |  |  |
| CONCLUS                     | IONS              |              | Vene        | 270       | Drawa  |  |  |  |
|                             |                   |              | YES         | No        | REMARKS:   |  |  |  |
| Hydric vegetation           | on met?           |              | $\boxtimes$ |           |  |  |  |  |
| Wetland hydrole             | ogy met?          |              | $\boxtimes$ |           |  |  |  |  |
| Hydric soils criterion met? |                   |              |             |           | Hydric characteristics spotty but present – weak hydrology<br>and soils evidence but strong hydrophytic vegetation<br>considered overriding. |  |  |  |
| IS THIS DATAPO              | INT IN A WE       | TLAND?       |             |           |  |  |  |  |
| IJ TIID DATAPO              | HILLIAN WE        | LUILIU.      |             |           |  |  |  |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-03

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-04

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

Date: Nov 14, 2002

Upland

Location: Gomes Brook southside "arm" extending well out from GB

| VEGETATION   |                        |                        | D      |                                   |
|--|------------------------|------------------------|--------|-----------------------------------|
| STRATUM AND SPECIES  | DOMINANCE<br>RATIO     | PERCENT<br>DOMINANCE   | O<br>M | NWI<br>STATUS                     |
| Shrubs   | 4 2 2 2 2 2 2 2        |                        |        |                                   |
| Lonicera morrowii  | 10/50                  | 20                     | X      | FACU                              |
| Rubus idaeus ?   | 40/50                  | 80                     | X      | FAC- or NI                        |
| <u>Herbs</u>   |                        |                        |        |                                   |
| Solidago rugosa  | 20                     | 100                    | X      | FAC                               |
|  |                        |                        |        |                                   |
|  | 1                      |                        |        |                                   |
|  |                        |                        |        |                                   |
|  |                        |                        |        |                                   |
|  |                        |                        |        |                                   |
| HYDROPHYTES  | Non-Hydroph            | YTES                   |        | TA CH                             |
| 0 0 1 0  | 1                      | 10                     |        |                                   |
| OBL FACW FAC *OTHER  | FAC-                   | FACU UP                | L      |                                   |
| Hydrophytes Subtotal (A):1   | Non-hydrophyte         | es Subtotal (B):_      | 2_     | - 11 1                            |
| PERCENT HYDROPHYTES (100A/A  | +B):1/3 = 33%_ o       | r 1/2 = 50%            |        | Complete A                        |
| THE PROTOCULAR OF THE PROTOCUL |                        | NIZES I                |        |                                   |
| HYDROLOGY  PECORDED DATA   |                        |                        |        |                                   |
| RECORDED DATA Stream, lake, or tidal gage Identification:  |                        |                        |        |                                   |
| Aerial photography Identification:   |                        |                        |        |                                   |
| Other Identification:  |                        |                        |        |                                   |
| ☑ No Recorded Data   |                        |                        |        |                                   |
| ☐ OBSERVATIONS   |                        |                        |        |                                   |
| Depth to Free Water: 14"   |                        |                        |        |                                   |
| Depth to Saturation (including capillary fringe): 11" (hea<br>Altered Hydrology (explain):   | avy rain previous day) |                        |        |                                   |
| ☐ Inundated ☐ Saturated in ☐ Water Marks upper 12"   | ☐ Drift Lines [        | Sediment  <br>Deposits | ☐ Dr   | rainage Patterns<br>ithin Wetland |
| ☐ OTHER (explain):   |                        |                        |        |                                   |

| Submission of photo of plot is encouraged.    DEPTH  | SOIL-Sketc   | h landscape posi           | tion of this p   | lot. Indi | cate rela | tive position of other plot(s) and | the wetland flag if not on plan.  |
|--|--|----------------------------|--|-----------|-----------|------------------------------------|---|
| DEPTH HORIZON MATRIX COLOR (color, abundance, size, contrast)  0-8" A 10YR3/2  8-20" B 2.5Y5/3   Silty loam, granular silty loam, blocky  1  |  |                            |  |           |           |                                    |   |
| DEPTH HORIZON MATRIX COLOR (color, abundance, size, contrast)  0-8" A 10YR3/2 silty loam, plocky  8-20" B 2.5Y5/3 silty loam, plocky  8-20" B 2.5Y5/3 silty loam, plocky  Silty loam, blocky  Silty loam, bloc | Submission of p  | hoto of plot is enco       | ouraged. Pl  | LEASE     | REFER     | R TO APPENDIX B, PHOT              | 0 #4  |
| 8-20" B 2.5Y5/3 silty loam, blocky   | 500/00/00/00/00/00   | The Control of the Control | A CONTRACTOR OF THE PARTY OF TH |           |           |                                    | (USDA texture, nodules, concretions,<br>masses, pore linings, restrictive layers,<br>root distribution, soil water, etc.)   |
| Prince Soil Indicators:  OPTIONAL Soil DATA  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  YES NO REMARKS: Hydric vegetation met?  Plant ID uncertain.  Wetland hydrology met? Hydric soils criterion met?  |  |                            |  |           |           |                                    | - Court of the Section of the Court of the Section |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met? Hydric soils criterion met?   | 8-20"  | В                          | 2.5  | (5/3      |           |                                    | silty loam, blocky  |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met? Hydric soils criterion met?   |  |                            | _  | 100       |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:   CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?   |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| OPTIONAL SOIL DATA  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  |  |                            |  |           |           |                                    |   |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?   | HYDRIC SOIL  | INDICATOR(S):              |  |           |           | REFERENCE(S):                      |   |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?   |  |                            |  |           |           |                                    |   |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?   |  |                            |  |           |           |                                    |   |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?   | OPTIONAL S   | оп Вата                    |  |           |           |                                    |   |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:   CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  | OF HONAL S   | OIL DATA                   |  |           |           | REFERENCE(S):                      |   |
| Depth to active water table: NTCHS hydric soil criterion:    CONCLUSIONS   | Taxonomic subg   | group:                     |  |           |           |                                    |   |
| CONCLUSIONS  YES NO REMARKS:  Hydric vegetation met?   | 123  |                            |  |           |           |                                    |   |
| CONCLUSIONS  YES NO REMARKS:  Hydric vegetation met? □ ☑ Plant ID uncertain.  Wetland hydrology met? □ ☑  Hydric soils criterion met? □ ☑  | The second secon |                            |  |           |           |                                    |   |
| YES NO REMARKS:  Hydric vegetation met? □ □ Plant ID uncertain.  Wetland hydrology met? □ □ □ □  | NICHS Hydric   | son criterion.             |  | -         |           |                                    |   |
| YES NO REMARKS:  Hydric vegetation met? □ □ Plant ID uncertain.  Wetland hydrology met? □ □ □ □  | CONCLU   | ISIONS                     |  |           |           |                                    |   |
| Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  Plant ID uncertain.  Wetland in the control of th | 301,020  |                            |  | YES       | No        | REMARKS:                           |   |
| Wetland hydrology met? □ ⊠  Hydric soils criterion met? □ ⊠  | Hydric vecet   | ation met?                 |  |           |           |                                    |   |
| Hydric soils criterion met? □ ⊠  |  |                            |  |           |           | rant in uncertain.                 |   |
|  |  |                            |  |           |           |                                    |   |
| IS THIS DATAPOINT IN A WETLAND?  |  |                            |  |           |           |                                    |   |
|  | Is This Data   | APOINT IN A WE             | TLAND?   |           |           |                                    |   |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-04

TRANSECT: N/A

PLOT: GB-(P)-05

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 14, 2002

WETLAND

LOCATION: SOUTHEAST NEAR CATTAIL MARSH IN SPRUCE PLANTING.

| VEGETATION  | 10000                                      | 11. 4%               |             |               |  |
|---|--|----------------------|-------------|---------------|--|
| STRATUM AND SPECIES   | DOMINANCE<br>RATIO                         | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |  |
| Trees   |  |                      |             |               |  |
| Acer rubrum (DBHs: 12,16)   | 314/643.7                                  | 48.8                 | X           | FAC           |  |
| Picea abies (DBHs: 8,16)  | 251.2/643.7                                | 39                   | X           |               |  |
| Prunus serotina (DBH: 10)   | 78.5/643.7                                 | 12.2                 |             | FACU          |  |
| Shrubs  |  | To the same          |             |               |  |
| Viburnum dentatum var. lucidum  | 30/40                                      | 75                   | X           | FACW-         |  |
| Rosa multiflora   | 10/40                                      | 25                   | X           | FACU          |  |
|   |  |                      |             |               |  |
|   |  |                      |             |               |  |
|   |  |                      |             | and district  |  |
| HYDROPHYTES   | NON-HYDROPHY                               | TES                  |             |               |  |
| 0         1         1         0           OBL         FACW         FAC         *OTHER           Hydrophytes Subtotal (A):         2 | O 1 0 UPL  Non-hydrophytes Subtotal (B): 1 |                      |             |               |  |
| PERCENT HYDROPHYTES (   | 100A/A+B): $2/3 = 6$                       | 7%                   |             |               |  |
| PERCENT HYDROPHYTES (   | 100A/A+B): $2/3 = 6$                       | 7%                   |             |               |  |

| HYDROLOGY  |                       | 4-34                    | 4 // 2 // 2        |                   |                                    |
|--|-----------------------|-------------------------|--------------------|-------------------|------------------------------------|
| ☐ RECORDED DATA  |                       |                         |                    |                   |                                    |
| Stream, lake, or tidal gage  | Identification:       |                         |                    |                   | 477-1406                           |
| Aerial photography   | Identification:       |                         |                    |                   | 5 5 24                             |
| Other  | Identification:       |                         |                    |                   |                                    |
| ☑ No Recorded Data   |                       |                         |                    |                   |                                    |
| <b>⊠</b> OBSERVATIONS  |                       |                         |                    |                   |                                    |
| Depth to Free Water: soi   | I nearly saturated to | surface (heavy          | rain previous day) |                   | 1,532                              |
| Depth to Saturation (inclu<br>Altered Hydrology (expla   |                       | e): <u>&gt;12" (cob</u> | bles below 12")    |                   |                                    |
| A STATE OF THE PARTY OF THE PAR | nurated in Wa         | ater Marks              | ☐ Drift Lines      | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| ☐ OTHER (explain):   |                       |                         |                    |                   | 10000                              |
|  |                       |                         |                    |                   |                                    |
|  |                       |                         |                    |                   |                                    |

| SOIL-Sketc                      | h landscape posi     | tion of this j | olot, India | cate rela | tive position of other plot(s) and                      | I the wetland flag if not on plan.   |
|---------------------------------|----------------------|----------------|-------------|-----------|---|--|
| Submission of n                 | hoto of plot is enco | ouraged h      | PLEASE      | REFE      | ER TO APPENDIX B, PHO                                   | OTO #5   |
| DEPTH                           | HORIZON              |                | COLOR       | R         | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0"                            | 0                    |                |             |           |   |  |
| 0-5"                            | A                    |                | R3/2        |           |   | loam, granular   |
| 5-12"                           | C                    | Gley           | 1 4/N       |           |   | sandy loam with much gravel  |
|                                 |                      |                | 11.1.       |           |   | and cobble; color due to<br>weathered rock   |
|                                 | INDICATOR(S):        |                | material    | is        | Reference(s):   |  |
| OPTIONAL S  Taxonomic subs      | group:<br>ass:       | a from dev     |             |           | REFERENCE(S):   |  |
| Depth to active<br>NTCHS hydric |                      |                |             |           |   |  |
| CONCLU                          | ISIONS               |                |             |           |   |  |
|                                 |                      |                | YES         | No        | REMARKS:  |  |
| Hydric veget                    | ation met?           |                |             | П         |   |  |
|                                 |                      |                |             |           |   |  |
| Wetland hyd                     | 500                  |                |             |           | 0 1   |  |
|                                 | criterion met?       |                |             |           | See discussion above                                    |  |
| IS THIS DATA                    | APOINT IN A WE       | TLAND?         | $\boxtimes$ |           |   | the second second second second  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: GB-(P)-05

TRANSECT: N/A

PLOT: GB-(P)-06

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 14, 2002

Upland

Location: SOUTHEAST NEAR CATTAIL MARSH IN SPRUCE PLANTING.

| VEGETATION  |                    |                  |     |         |
|---|--------------------|------------------|-----|---------|
|   |                    |                  | D   |         |
|   | DOMINANCE          | PERCENT          | 0   | NWI     |
| STRATUM AND SPECIES   | RATIO              | DOMINANCE        | M   | STATUS  |
| Trees   |                    |                  |     |         |
| Acer rubrum (DBHs: 16,12)   | 354/954.6          | 33               | X   | FAC     |
| Picea abies (DBHs: 8,16,10,10,14)   | 562.1/954.6        | 59               | X   |         |
| Prunus serotina (DBH:10")   | 78.5/954.6         | 8                |     | FACU    |
| Shrubs  |                    |                  |     |         |
| Viburnum dentatum var. lucidum  | 10/20              | 50               | X   | FACW-   |
| Rosa multiflora   | 10/20              | 50               | X   | FACU    |
|   |                    |                  |     |         |
|   |                    |                  |     | ET BETT |
|   |                    |                  |     |         |
|   |                    |                  |     |         |
|   |                    |                  |     |         |
|   |                    |                  |     |         |
| HYDROPHYTES   | Non-Hydrophy       | /TES             | 3.6 |         |
| _0110   | 0                  | 1 0              |     |         |
| OBL FACW FAC *OTHER   | FAC- F             | FACU UP          | L   |         |
|   |                    |                  |     |         |
| Hydrophytes Subtotal (A): 2   | Non-hydrophyte     | s Subtotal (B):_ | _1_ | _       |
| PERCENT HYDROPHYTES (1  | 100A/A+R): 2/3 =/6 | 70/2             |     |         |
| A DEVOLUTE AND LAND LAND LAND LAND LAND LAND LAND                               | .001911.2)         | 70               |     |         |
| THY DD OT OCK   |                    | April 1          |     |         |
| HYDROLOGY   |                    |                  |     |         |
| ☐ RECORDED DATA   |                    |                  |     |         |
| Stream, lake, or tidal gage Identification:  Aerial photography Identification: |                    |                  |     |         |

| HYDROLOGY  |                                     |                              |                        |   |
|--|-------------------------------------|------------------------------|------------------------|---|
| □ RECORDED DATA                                      |                                     |                              |                        |   |
| Stream, lake, or tidal gage                          | Identification:                     |                              |                        |   |
| Aerial photography                                   | Identification:                     |                              |                        | - 100                                   |
| Other  | Identification:                     |                              |                        |   |
| ☑ No Recorded Data                                   |                                     |                              |                        | an electrical                           |
| ○ OBSERVATIONS                                       |                                     |                              |                        | 100000000000000000000000000000000000000 |
| Depth to Free Water:                                 |                                     |                              |                        |   |
| Depth to Saturation (incl<br>Altered Hydrology (expl | luding capillary fringe): >13 ain): | " soil moist at this depth ( | cobble/rock below)     |   |
|  | turated in Water Mar                | ks Drift Lines               | ☐ Sediment<br>Deposits | ☐ Drainage Patterns<br>within Wetland   |
| ☐ OTHER (explain):                                   |                                     |                              |                        |   |
|  |                                     |                              |                        | 100000                                  |
|  | A Shipplife                         |                              |                        |   |

| Submission of p  | hoto of plot is enco  | ouraged. PI | LEASE R    | REFE | R TO APPENDIX B, PHOT                                     | O #6  |
|--|---|-------------|------------|------|---|---|
| DEPTH  | Horizon   | MATRIX      | Color      |      | CEDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers root distribution, soil water, etc.) |
| 1-0"   | 0   | 1077        | / -        |      |   |   |
| 0-8"   | A   | 10YI        |            |      |   | silty loam, granular  |
| 8-13"  | С   | Gley        | 1 4/N      |      |   | silty loam, w/much gravel and   |
|  |   |             |            |      |   | cobble; color due to<br>weathered rock  |
|  |   |             |            |      |   | weathered took  |
|  |   |             |            |      |   |   |
|  |   |             |            |      |   |   |
|  |   |             |            |      |   |   |
|  |   |             |            |      |   |   |
|  |   |             |            |      |   |   |
|  |   |             |            |      |   |   |
| HYDRIC SOIL  | INDICATOR(S):   | : Mapped N  | NeB        |      | REFERENCE(S):   |   |
|  |   | : Mapped N  | NeB        |      | REFERENCE(S):   |   |
| HYDRIC SOIL  |   | : Mapped l  | NeB        |      |   |   |
| OPTIONAL S   | OIL DATA  | : Mapped N  | NeB        |      | REFERENCE(S):  REFERENCE(S):                              |   |
|  | OIL DATA group:   | : Mapped I  | NeB        |      |   |   |
| OPTIONAL S  Faxonomic subjection of the second distance of the secon | OIL DATA group: ass:  | : Mapped N  | NeB        |      |   |   |
| OPTIONAL S  Taxonomic subgoil drainage cl Depth to active  | OIL DATA group: ass: water table:                                   | : Mapped l  | NeB        |      |   |   |
| OPTIONAL S   | OIL DATA group: ass: water table: soil criterion:                   | : Mapped N  | NeB        |      |   |   |
| OPTIONAL S  Faxonomic sub- Soil drainage el Depth to active NTCHS hydric   | OIL DATA group: ass: water table: soil criterion:                   | : Mapped I  | NeB<br>YES | No   |   |   |
| Deptional S  Taxonomic subgooil drainage cl Depth to active NTCHS hydric   | OIL DATA group: ass: water table: soil criterion:                   | : Mapped N  |            | No   | REFERENCE(S):   |   |
| Deptional S  Caxonomic subgooil drainage electric depth to active NTCHS hydric  CONCLU   | OIL DATA group: ass: water table: soil criterion: USIONS ation met? | : Mapped N  | YES        |      | REFERENCE(S):   |   |
| OPTIONAL S  Faxonomic subposed in the second drainage of the sective NTCHS hydric  CONCLUMENTAL S  Hydric veget Wetland hydric   | OIL DATA group: ass: water table: soil criterion: USIONS ation met? | : Mapped I  | Yes 🖂      |      | REFERENCE(S):   |   |

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TRANSECT: N/A

PLOT: TF5-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE**: OCT 19, 2002

Upland

LOCATION: BESIDE ACCESS ROAD NEAR CLUSTERED MONITORING WELLS

| DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE   | D<br>O<br>M       | NWI<br>STATUS           |
|--------------------|--|-------------------|-------------------------|
|                    |  |                   |                         |
| 3/61               | 5  |                   |                         |
| 2/61               | 3  |                   | FACW                    |
| 2/61               | 3  | F (1)             | FACW+                   |
| 1/61               | 2  | 1                 | FAC                     |
| 30/61              | 50   | X                 | FACU                    |
| 3/61               | 5  |                   | FAC-/<br>FACW           |
| 10/61              | 16   |                   | FACU                    |
| 10/61              | 16   |                   |                         |
|                    |  |                   |                         |
| Non-Hydrophy       | YTES   |                   |                         |
| 49-1-2             |  |                   |                         |
| 100A/A+B): $0/1=0$ | 0%   |                   |                         |
|                    | 3/61   2/61   2/61   1/61   30/61   3/61   10/61   10/61   10/61 | RATIO   DOMINANCE | DOMINANCE   PERCENT   O |

| HYDROLOGY                   | III Been  |                |                   | AHE OF MALE                      |
|-----------------------------|---|----------------|-------------------|----------------------------------|
| ☐ RECORDED DATA             |   |                |                   | 4                                |
| Stream, lake, or tidal gage | Identification:   |                |                   |                                  |
| Aerial photography          | Identification:   |                |                   |                                  |
| Other                       | Identification:   |                |                   |                                  |
|                             |   |                |                   |                                  |
| ○ OBSERVATIONS              |   |                |                   |                                  |
| Depth to Free Water:        |   |                |                   | and the second                   |
|                             | uding capillary fringe): <u>&gt;18"</u><br>ain): <u>Filled area part of tank fa</u> | rm; very level |                   | 1000                             |
|                             | turated in Water Marks  | ☐ Drift Lines  | Sediment Deposits | Drainage Patterns within Wetland |
| OTHER (explain): ox rh      | niz at 10"+   |                |                   |                                  |
|                             |   |                |                   |                                  |
|                             |   | - Aug 1 00 m   |                   |                                  |

| SOIL-Sketch         | landscape posit     | tion of this p | lot. Indi       | cate rela   | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|---------------------|---------------------|----------------|-----------------|-------------|---|--|
|                     |                     |                |                 |             |   |  |
| Submission of pho   | oto of plot is enco | uraged. PI     | LEASE           | REFER       | R TO APPENDIX B, PHOT                                   | O #7   |
| Dертн               | Horizon             | MATRIX         | COLOR           | R           | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-10"               | Fill                | 2.5Y           | at of this case |             | • 55.0  | loamy sand; gravelly fill  |
| 10-14"              | B?                  | 2.5Y           | /3/2            |             | 10YR3/3, 20-50%, 1-2, f/d                               | loam, blocky; ox rhiz  |
| 14.100              | DO                  | 1045           | 22/2            |             | ox rhiz: 10YR3/3, many                                  | Soil moist   |
| 14-18"              | B?                  | 10YI           | C3/3            |             | •   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     | 14             |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   | The second secon |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   |  |
| HYDRIC SOIL I       | NDICATOR(S):        | 0              |                 |             | REFERENCE(S):   | TO THE PROPERTY OF THE PARTY OF |
|                     |                     |                |                 |             |   |  |
|                     |                     |                |                 |             |   | 1 8 T - W 10 1 - 1 (180 )  |
| Opproves            | II Dama             |                |                 | -           |   |  |
| OPTIONAL SO         | IL DATA             |                |                 |             | PEEEDENOE(c)  |  |
| Taxonomic subgro    | oup: Udorthent      |                |                 |             | REFERENCE(S):<br>1981 soil survey                       |  |
| Soil drainage class |                     |                |                 |             | 1701 SOII SULVEY  |  |
| Depth to active w   | vater table:        |                |                 |             |   |  |
| NTCHS hydric so     | oil criterion:      |                |                 |             |   | The Market State of the State o |
|                     | 4-8-1-1-1           |                |                 | 11/2        |   |  |
| CONCLUS             | SIONS               |                |                 |             |   |  |
|                     |                     |                | YES             | No          | REMARKS:  |  |
| Hydric vegetat      | tion met?           |                |                 | $\boxtimes$ |   |  |
| Wetland hydro       |                     |                |                 | $\boxtimes$ |   | THE WORLD TO   |
| Hydric soils cr     |                     |                |                 |             | NEHSTC (1998) criteria no                               | t met.   |
| IS THIS DATAP       |                     | TLAND?         |                 |             |   |  |
|                     |                     |                |                 |             |   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF5-(P)-01

TRANSECT: N/A

PLOT: TF5-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE**: OCT 19, 2002

Wetland

LOCATION: SAME AS TF5(P)-01 BUT IN WETLAND

| VEGETATION                  | 1                   |                      | _           | A P           |
|-----------------------------|---------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES         | DOMINANCE<br>RATIO  | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| <u>Herbs</u>                | TELL                | The state of         |             | Street, A. C. |
| Juncus effusus              | 50/79               | 63                   | X           | FACW+         |
| Lythrum salicaria           | 2/79                | 3                    |             | FACW+         |
| Polygonum pensylvanicum     | 15/79               | 19                   |             | FACW          |
| Euthamia tenuifolia         | 5/79                | 6                    |             | FACU          |
| Echinochloa crusgalli       | 5/79                | 6                    |             | FACU          |
| Aster pilosus ?             | 2/79                | 3                    |             |               |
|                             |                     |                      |             |               |
|                             |                     |                      |             |               |
|                             |                     |                      |             | 645           |
|                             |                     | ATT OF THE           | 15          |               |
|                             |                     |                      |             |               |
|                             |                     |                      |             | N. Mary       |
|                             |                     |                      |             |               |
|                             |                     |                      |             |               |
| HYDROPHYTES                 | NON-HYDROPHY        | TES                  |             | 3             |
| 0 1 0 0                     | 0                   | 0 0                  |             |               |
| OBL FACW FAC *OTHER         | FAC- F              | ACU UP               | L           |               |
|                             |                     |                      |             |               |
| Hydrophytes Subtotal (A): 1 | Non-hydrophyte      | s Subtotal (B):_     | _0_         | - 15.11       |
| PERCENT HYDROPHYTES (100A   | A/A+B): $1/1 = 100$ | 0%                   |             |               |
|                             | /                   |                      | _           |               |

| HYDROLOGY  |   | 7 - 1  |                   | - 4 H2-17  |
|--|---|--|-------------------|--|
| ☐ RECORDED DATA  |   |  |                   |  |
| Stream, lake, or tidal gage                            | Identification:                         |  |                   |  |
| Aerial photography                                     | Identification:                         |  |                   |  |
| Other  | Identification:                         |  |                   | The second second  |
| ☑ No RECORDED DATA                                     |   |  |                   |  |
| ○ OBSERVATIONS   |   |  |                   | - 5-12-15  |
| Depth to Free Water: >                                 | 16"                                     |  |                   | A COLUMN TO A STATE OF THE STAT |
| Depth to Saturation (incle<br>Altered Hydrology (expla | uding capillary fringe): soil satuain): | urated at 5-8"   |                   |  |
|  | turated in Water Marks per 12"          | ☐ Drift Lines  | Sediment Deposits | Drainage Patterns<br>within Wetland  |
| OTHER (explain): stain                                 | ned lvs, ox rhiz                        |  |                   |  |
|  |   |  |                   | and the second   |
|  |   | of the state of th |                   |  |

| SOIL-Sketo      | ch landscape posi    | tion of this | plot. Indi  | cate rela | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|-----------------|----------------------|--------------|-------------|-----------|---|--|
|                 |                      |              |             |           |   |  |
| Submission of p | hoto of plot is enco | ouraged. P   | LEASE       | REFEI     | R TO APPENDIX B, PHOT                                   | O #7   |
| DEPTH           | Horizon              | MATRD        | COLOR       |           | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-8"            | С                    | 2.5          | Y4/1        |           | 10YR3/4 (20%) 2.5,d                                     | sandy loam w/phyllite gravel   |
| 8-16"           | C                    | 2.5          | Y4/1        |           | 10YR3/4 (20-40%) 1-3,d                                  | silty loam w/phyllite gravel   |
|                 |                      |              |             |           | ox rhiz: 10YR3/4, many                                  |  |
| 16"+            | С                    |              |             |           |   | gray phyllite gravel and cobble  |
|                 |                      |              |             |           |   |  |
|                 |                      |              |             |           |   |  |
|                 |                      |              |             |           |   |  |
|                 |                      |              |             |           |   |  |
|                 |                      |              |             |           |   |  |
|                 |                      |              |             |           |   |  |
| Disturbed soi   | LINDICATOR(S):       | ature of the | -           |           | REFERENCE(S):   |  |
| OPTIONAL S      |                      |              |             |           |   |  |
|                 | group: Udorthen      | t            |             |           | REFERENCE(S):   |  |
| Depth to active |                      |              |             |           |   |  |
| NTCHS hydric    | soil criterion:      |              |             |           | 3.500   | The same of the sa |
| CONCLU          | USIONS               |              |             |           |   |  |
|                 |                      |              | YES         | No        | REMARKS:  |  |
| Hydric veget    | ation met?           |              | $\boxtimes$ |           |   |  |
| Wetland hyd     | rology met?          |              |             |           |   |  |
| Hydric soils    | criterion met?       |              |             |           | See above.  |  |
| IS THIS DATA    |                      |              | $\boxtimes$ |           |   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF5-(P)-02

TRANSECT: N/A

PLOT: TF5-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE**: OCT 19, 2002

Wetland

LOCATION: CATTAIL MARSH OVER TANK

| VEGETATION   | 14 July 18                    |                                       |             |               |
|--|-------------------------------|---------------------------------------|-------------|---------------|
| STRATUM AND SPECIES  | DOMINANCE<br>RATIO            | PERCENT<br>DOMINANCE                  | D<br>O<br>M | NWI<br>STATUS |
| <u>Herbs</u>   |                               |                                       |             | 916           |
| Euthamia tenuifolia  | 5/39                          | 13                                    |             | FACU          |
| Typha latifolia  | 10/39                         | 26                                    | X           | OBL           |
| Juncus tenuis  | 2/39                          | 5                                     |             | FAC-/<br>FACW |
| Juncus canadensis  | 20/39                         | 51                                    | X           | OBL           |
| Agrostis stolonifera ?   | 2/39                          | 5                                     |             | FACW          |
|  |                               |                                       |             |               |
| HYDROPHYTES  | Non-Hydrophy                  | TES                                   |             |               |
| 2     0     0       OBL     FACW     FAC       *OTHER   Hydrophytes Subtotal (A):2 | O<br>FAC- F<br>Non-hydrophyte | O O O O O O O O O O O O O O O O O O O | L           |               |
| PERCENT HYDROPHYTES (10  | 00A/A+B): $2/2 = 10$          | 0%                                    |             | 100           |

| HYDROLOGY  |   |                      | -                    |                                       |
|--|---|----------------------|----------------------|---------------------------------------|
| ☐ RECORDED DATA  |   |                      |                      | Y                                     |
| Stream, lake, or tidal gage  | Identification:                                   |                      |                      |                                       |
| Aerial photography   | Identification:                                   |                      |                      |                                       |
| Other  | Identification:                                   |                      |                      | THE PERSON                            |
| ☑ No Recorded Data   |   |                      |                      |                                       |
| ○ OBSERVATIONS   |   |                      |                      | 71 114                                |
| Depth to Free Water: 0'  |   |                      |                      |                                       |
| Depth to Saturation (inclu<br>Altered Hydrology (expla   | uding capillary fringe): <u>to surfa</u><br>ain): | ce                   |                      | 1000                                  |
|  | curated in Water Marks                            | ☐ Drift Lines        | Sediment Deposits    | ☐ Drainage Patterns<br>within Wetland |
| OTHER (explain): Pit at  | t western boundary had: depth to                  | free water @ 20", de | pth to saturated @16 | "                                     |
|  |   |                      |                      |                                       |
| The second secon |   |                      |                      |                                       |

| SOIL-Sketc                        | ch landscape posit              | tion of this p | lot. Indic  | ate rela | tive position of other plot(s) and                      | the wetland flag if not on plan.   |  |  |
|-----------------------------------|---------------------------------|----------------|-------------|----------|---|--|--|--|
| 61                                | 6                               | , D            | FASE        | DEFE     | D TO ADDENDIN D DITO                                    | FO 40  |  |  |
| DEPTH                             | hoto of plot is enco            | MATRIX         |             | R        | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |  |  |
| 0-12"                             | A                               | Gley 1         | 4/10Y       |          | 75  | mixed sandy loam w/gravel  |  |  |
| 0-12"                             | A                               | 5Y             | /3          |          |   | and cobbles  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             | -        |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             | _        |   |  |  |  |
|                                   |                                 |                |             | -        |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
|                                   |                                 |                |             |          |   |  |  |  |
| HYDRIC SOIL<br>IIID               | .INDICATOR(S):                  |                |             |          | REFERENCE(S):<br>NEHSTC (1998)                          |  |  |  |
| OPTIONAL S                        | OIL DATA                        |                |             |          |   |  |  |  |
| Taxonomic sub<br>Soil drainage cl | group: Udorthen<br>ass:         | t              |             |          | REFERENCE(S):   |  |  |  |
| Depth to active                   |                                 |                |             |          |   |  |  |  |
| NTCHS hydric                      | soil criterion:                 |                |             |          |   | The Lieuwell Brown   |  |  |
|                                   |                                 | The same       |             |          | 7.07.4.1  |  |  |  |
| CONCLU                            | JSIONS                          |                |             |          |   |  |  |  |
|                                   |                                 |                | YES         | No       | REMARKS:  |  |  |  |
| Hydric veget                      | ation met?                      |                | $\boxtimes$ |          |   |  |  |  |
| Wetland hyd                       |                                 |                | $\boxtimes$ |          |   |  |  |  |
|                                   | criterion met?                  |                | $\boxtimes$ |          |   |  |  |  |
|                                   |                                 | TI AND?        |             |          | clearly delineated by tongo                             | ranhy  |  |  |
| IS THIS DATA                      | IS THIS DATAPOINT IN A WETLAND? |                |             |          |   |  |  |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF5-(P)-03

TRANSECT: N/A

PLOT: TF5-(P)-04

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE: OCT 19, 2002** 

Wetland

LOCATION: EMERGENT WETLAND TO THE SW IN TF5

| VEGETATION   | 557 HE 5 17 P             |                      |             |               |
|--|---------------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES  | DOMINANCE<br>RATIO        | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Herbs  | KATIO                     | DOMINANCE            | 141         | DIATOS        |
| Juncus effusus   | 30/87                     | 34                   | х           | FACW+         |
| Dactylis glomerata   | 10/87                     | 11                   |             | FACU          |
| Scirpus cyperinus  | 25/87                     | 29                   | X           | FACW+         |
| Agrostis stolonifera ?   | 5/87                      | 6                    |             | FACW          |
| Polygonum pennsylvanicum   | 2/87                      | 2                    | 7. 7        | FACW          |
| Euthamia tenuifolia  | 10/87                     | 11                   |             | FACW          |
| Rumex crispus  | 5/87                      | 6                    |             | FACW          |
| Shrubs   |                           |                      |             |               |
| Salix discolor   | 2/2                       | 100%                 |             | FACW          |
|  |                           |                      | / 4         |               |
| HYDROPHYTES  | Non-Hydrophy              | /TES                 |             |               |
| $\frac{0}{\text{OBL}}$ $\frac{2}{\text{FACW}}$ $\frac{0}{\text{FAC}}$ *OTHER | $\frac{0}{\text{FAC-}}$   | ACU UP               | _           |               |
| Hydrophytes Subtotal (A): 2  | Non-hydrophyte            | es Subtotal (B):_    | 0           | _             |
| PERCENT HYDROPHYTES (10  | 00A/A+B): <u>2/2</u> = 10 | 0%                   |             |               |

| HYDROLOGY   |                                       | 3 17 6        |                   | THE REAL PROPERTY.                      |
|---|---------------------------------------|---------------|-------------------|---|
| ☐ RECORDED DATA                                       |                                       |               |                   |   |
| Stream, lake, or tidal gage                           | Identification:                       |               |                   | The second second                       |
| Aerial photography                                    | Identification:                       |               |                   |   |
| Other   | Identification:                       |               |                   |   |
| ☑ No Recorded Data                                    |                                       |               |                   |   |
| ○ OBSERVATIONS  |                                       |               |                   | 100000000000000000000000000000000000000 |
| Depth to Free Water:                                  |                                       |               |                   |   |
| Depth to Saturation (incl<br>Altered Hydrology (expla | luding capillary fringe): ≥10" lain): |               |                   | and the state of                        |
|   | aturated in Water Marks               | ☐ Drift Lines | Sediment Deposits | ☐ Drainage Patterns<br>within Wetland   |
| OTHER (explain): wat                                  | ter stained leaves                    |               |                   |   |
|   |                                       |               |                   |   |

| SOIL-Sketch       | h landscape posi   | tion of this pl | ot. Indi    | cate rela   | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|-------------------|--|-----------------|-------------|-------------|---|--|
|                   |  |                 |             |             |   |  |
| Submission of ph  | noto of plot is enco   | ouraged. PL     | EASE        | REFEF       | R TO APPENDIX B, PHOT                                   | CO #9  |
| DEPTH             | Horizon  | MATRIX          | Color       |             | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-7"              | C  | 2.5Y            | 4/2         |             | 10YR4/4   | loam mixed w/gravel and  |
|                   |  |                 |             |             |   | cobble phyllite  |
| 7"+               | C  | -               |             |             | •   | predominantly phyllite   |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
|                   |  |                 |             |             |   |  |
| Disturbed soil    | INDICATOR(S):<br>l column and no<br>fined New Eng<br>ing.  | ature of the    |             |             | REFERENCE(S):   |  |
| OPTIONAL SO       |  |                 | _           |             |   |  |
|                   |  |                 |             |             | REFERENCE(S):   |  |
| Taxonomic subg    | The same of the sa |                 |             |             |   |  |
| Soil drainage cla |  |                 |             |             |   |  |
| Depth to active v |  |                 |             |             |   |  |
| NTCHS hydric s    | son criterion.   |                 |             |             |   | The state of the s |
| CONCLU            | SIONS  |                 | _           |             |   |  |
| CONCLU            | SIONS  |                 | Vrc         | No          | DEMARKS   |  |
|                   | TO A CONTRACT OF THE PARTY OF T |                 | YES         | No          | REMARKS:  |  |
| Hydric vegeta     | ation met?   |                 |             |             |   |  |
| Wetland hydr      | rology met?  |                 | $\boxtimes$ |             |   |  |
| Hydric soils o    | criterion met?   |                 |             | $\boxtimes$ | See above.  |  |
| IS THIS DATA      | POINT IN A WE  | TLAND?          | $\boxtimes$ |             | The state of the state of                               |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF5-(P)-04

TRANSECT: N/A

PLOT: TF5-(P)-05

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE: OCT 19, 2002** 

Upland

LOCATION: WETLAND TO THE SW IN TF5.

| VEGETATION                                       | -                  |                      |             |               |  |  |
|--|--------------------|----------------------|-------------|---------------|--|--|
| STRATUM AND SPECIES                              | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |  |  |
| <u>Herbs</u>                                     | 340 14             |                      |             |               |  |  |
| Rumex crispus                                    | 10/68              | 15                   | X           | FACU          |  |  |
| Solidago rugosa                                  | 2/68               | 3                    |             | FAC           |  |  |
| Dactylis glomerata                               | 30/68              | 44                   | X           | FACU          |  |  |
| Rosa multiflora                                  | 10/68              | 15                   | X           | FACU          |  |  |
| Centaurea nigra                                  | 10/68              | 15                   | X           |               |  |  |
| Vicia sativa                                     | 2/68               | 3                    |             | Teal          |  |  |
| Euthamia tenuifolia                              | 2/68               | 3                    |             | FACU          |  |  |
| Festuca rubra                                    | 2/68               | 3                    | 111         | FACU          |  |  |
| Shrubs   |                    |                      |             |               |  |  |
| Elaeagnus umbellata                              | 20/20              | 100                  | X           | -             |  |  |
|  |                    |                      |             |               |  |  |
| HYDROPHYTES                                      | Non-Hydrophytes    |                      |             |               |  |  |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 0 | FAC- F             | ACU UP               |             |               |  |  |
| PERCENT HYDROPHYTES (1                           |                    |                      |             |               |  |  |

| <b>HYDROLOGY</b>                                      |                     | A STATE OF      |               | -                 | the second second                |
|---|---------------------|-----------------|---------------|-------------------|----------------------------------|
| ☐ RECORDED DATA                                       |                     |                 |               |                   |                                  |
| Stream, lake, or tidal gage                           | Identificati        | on:             |               |                   |                                  |
| Aerial photography                                    | Identificati        | on:             |               |                   |                                  |
| Other   | Identificati        | on:             |               |                   | 100 1 1 1 1 1 1 1 1              |
| ☑ No Recorded Data                                    |                     |                 |               |                   |                                  |
| ○ OBSERVATIONS  |                     |                 |               |                   |                                  |
| Depth to Free Water:                                  |                     |                 |               |                   |                                  |
| Depth to Saturation (inch<br>Altered Hydrology (expla |                     | y fringe): >10" |               |                   |                                  |
|   | turated in [per 12" | Water Marks     | ☐ Drift Lines | Sediment Deposits | Drainage Patterns within Wetland |
| ☐ OTHER (explain):                                    |                     |                 |               |                   |                                  |
|   |                     |                 |               |                   |                                  |

| SOIL-Sketc        | h landscape posi     | tion of this | plot. Indi | cate rela   | tive position of other plot(s) and                      | d the wetland flag if not on plan.   |
|-------------------|----------------------|--------------|------------|-------------|---|--|
|                   |                      |              |            |             |   |  |
| Submission of p   | hoto of plot is enco | ouraged. I   | LEASE      | REFE        | R TO APPENDIX B, PHO                                    | TO #9  |
| DEPTH             | Horizon              | MATRI        | COLOR      |             | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-8"              | С                    |              | Y4/2       |             |   | loam, mixed w/variable   |
|                   |                      |              | colors-    |             |   | sizes of phyllite  |
| 8"+               | C                    | averag       | ge read)   |             |   | predominantly phyllite   |
| 0 Т               | C                    |              |            |             |   | predominantly phymic   |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   | -                    |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
| HYDRIC SOIL       | INDICATOR(S)         |              |            |             | REFERENCE(S):   |  |
|                   |                      |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
| OPTIONAL S        | OIL DATA             | W 11 11 11   | 1          |             |   | The state of the s |
| <u>Or morning</u> | <u> </u>             |              |            |             | REFERENCE(S):   |  |
| Taxonomic sub     | group: Udorthen      | t            |            |             |   |  |
| Soil drainage cl  |                      |              |            |             |   |  |
| Depth to active   |                      |              |            |             |   |  |
| NTCHS hydric      | soil criterion:      |              |            |             |   |  |
| CONCLU            | ISIONS               |              |            |             |   |  |
|                   |                      |              | YES        | No          | REMARKS:  |  |
| Hydric veget      | ation met?           |              |            |             |   |  |
|                   |                      |              |            |             |   |  |
| Wetland hyd       |                      |              | _          |             |   |  |
|                   | criterion met?       |              |            |             |   |  |
| IS THIS DATA      | APOINT IN A WE       | TLAND?       |            | $\boxtimes$ | the second second second                                |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF5-(P)-05

TRANSECT: N/A

PLOT: TF4C-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 11, 2002

Upland

LOCATION: ALONG NORTH SIDE - 500 FT FROM ROAD

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO     | PERCENT<br>DOMINANC<br>E | D<br>O<br>M | NWI<br>STATUS |
|--|------------------------|--------------------------|-------------|---------------|
| <u>Herbs</u>   |                        |                          |             |               |
| Solidago rugosa  | 75/90                  | 83                       | X           | FAC           |
| Euthamia tenuifolia  | 5/90                   | 6                        |             | FACU          |
| Rumex crispus  | 5/90                   | 6                        |             | FACU          |
| Juncus tenuis  | 5/90                   | 6                        |             | FAC-/<br>FACW |
|  |                        |                          |             |               |
| HYDROPHYTES  OBL FACW 1 FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10)  | Non-hydrophy           | FACU UI                  |             | 0             |
| HYDROLOGY  □ RECORDED DATA  Stream, lake, or tidal gage Aerial photography Other  Identification: Identification:  □ NO RECORDED DATA □ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): >18" |                        |                          |             |               |
| Altered Hydrology (explain):  Inundated Saturated in Water Marks upper 12"   | ☐ Drift Lines          | Sediment [               |             | nage Patterns |
| ☐ OTHER (explain): ox rhiz. Some ruts from when soil pos   | ssibly saturated. No c |                          |             | m would       |

|  |   |                            |           |        | ave position of early proxity                            | and the wetland flag if not on plan.   |
|--|---|----------------------------|-----------|--------|--|--|
|  |   |                            |           |        |  |  |
| Submission of pl   | hoto of plot is ence  | ouraged. P                 | LEASE     | REFE   | R TO APPENDIX B, PH                                      | OTO #10  |
| DEPTH  | Horizon   | MATRIX                     |           |        | REDOXIMORPHIC EATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-2"   | A   | 2.5Y                       | 3/1       |        |  | silty loam   |
| 2-8"   | A   | 2.5Y                       |           |        | 10YR3/3, 5, 1-5, f                                       | silty loam w/gravel  |
| 8-18"  | C   | 2.5Y                       | 3/1       |        |  | sandy loam w/gravel and  |
|  |   |                            |           |        |  | cobble abundant  |
| 18"+   |   |                            |           |        |  | very rocky   |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
| STEPPEN.   |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
| LEE BUYE   |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
|  |   |                            |           |        |  |  |
| Hamara Co-   | Inmedian (a)  |                            |           |        | Department (a)   | MALA DESTRUCTIONS  |
|  | INDICATOR(S)  |                            | (1000)    | T      | REFERENCE(S):  |  |
| Hydric indica  | tors do not me  | et NEHSTC                  |           |        |  |  |
| Hydric indica<br>matrix color a  | tors do not mea   | et NEHSTC                  |           |        |  |  |
| Hydric indica<br>matrix color a<br>disturbed in the  | tors do not me<br>appeals to be na<br>his area.   | et NEHSTC<br>ative soil co | lor. Soil |        |  |  |
| Hydric indica<br>matrix color a  | tors do not me<br>appeals to be na<br>his area.   | et NEHSTC                  | lor. Soil |        | oly  |  |
| Hydric indica<br>matrix color a<br>disturbed in the  | ators do not medappeals to be nathis area.  | et NEHSTC<br>ative soil co | lor. Soil |        |  |  |
| Hydric indica<br>matrix color a<br>disturbed in the<br>OPTIONAL So   | appeals to be not his area.  OIL DATA Maroup:   | et NEHSTC<br>ative soil co | lor. Soil |        | oly  |  |
| Hydric indica<br>matrix color a<br>disturbed in the<br>OPTIONAL So<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active to  | ators do not medappeals to be not his area.  OIL DATA  group: ass: water table:                       | et NEHSTC<br>ative soil co | lor. Soil |        | oly  |  |
| Hydric indica<br>matrix color a<br>disturbed in the<br>OPTIONAL So<br>Taxonomic subg<br>Soil drainage cla  | ators do not medappeals to be not his area.  OIL DATA  group: ass: water table:                       | et NEHSTC<br>ative soil co | lor. Soil |        | oly  |  |
| Hydric indica<br>matrix color a<br>disturbed in the<br>OPTIONAL So<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active to<br>NTCHS hydric s  | appeals to be not mean this area.  OIL DATA  group: ass: water table: soil criterion:                 | et NEHSTC<br>ative soil co | lor. Soil |        | oly  |  |
| Hydric indical matrix color and disturbed in the OPTIONAL Solor Taxonomic subground Soil drainage clarates to active | appeals to be not mean this area.  OIL DATA  group: ass: water table: soil criterion:                 | et NEHSTC<br>ative soil co | lor. Soil | probab | REFERENCE(S):  |  |
| Hydric indical matrix color a disturbed in the OPTIONAL Solution Taxonomic subgravity Soil drainage clarates between NTCHS hydric selections.  | appeals to be not med appeals to be not his area.  OIL DATA  group: ass: water table: soil criterion: | et NEHSTC<br>ative soil co | YES       | No     | oly  |  |
| Hydric indica<br>matrix color a<br>disturbed in the<br>OPTIONAL So<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active to<br>NTCHS hydric s  | appeals to be not med appeals to be not his area.  OIL DATA  group: ass: water table: soil criterion: | et NEHSTC<br>ative soil co | Yes       | probab | REFERENCE(S):  |  |
| Hydric indica matrix color a disturbed in the OPTIONAL Set Taxonomic subground Soil drainage claration beat to active to NTCHS hydric set CONCLU   | ation met?  | et NEHSTC<br>ative soil co | YES       | No     | REFERENCE(S):  |  |
| Hydric indical matrix color and disturbed in the OPTIONAL Solor Taxonomic subgrounds Soil drainage clarates of NTCHS hydric solor CONCLU   | ation met?  | et NEHSTC<br>ative soil co | Yes       | No     | REFERENCE(S):  REMARKS:                                  |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4C-(P)-01

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4C-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

DATE: NOV 11, 2002 Wetland

LOCATION:

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO  | PERCENT<br>DOMINANCE      | D<br>O<br>M | NWI<br>STATUS  |
|--|---------------------|---------------------------|-------------|----------------|
| Herbs  |                     |                           |             |                |
| Juncus effusus   | 80/95               | 84                        | X           | FACW+          |
| Solidago rugosa  | 10/95               | - 11                      |             | FAC            |
| Euthamia tenuifolia  | 5/95                | 5                         |             | FACU           |
|  |                     |                           |             |                |
|  |                     |                           |             |                |
|  |                     |                           |             |                |
|  |                     |                           |             |                |
|  |                     |                           |             |                |
|  |                     |                           |             |                |
| HYDROPHYTES  | Non-Hydro           | PHYTES                    |             |                |
| OBL FACW FAC *OTHER  | FAC-                | FACU UI                   |             |                |
| 1  | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10)  HYDROLOGY  | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10)   | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| DBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10  HYDROLOGY  □ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification:  No RECORDED DATA  | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10  HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification:  | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| DBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (10  HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification:  NO RECORDED DATA  Stream, lake, or tidal gage Identification: Other Identification: Other Identification:                   | FAC-<br>Non-hydropl | FACU UI                   |             | 0              |
| DBL FACW FAC *OTHER  Hydrophytes Subtotal (A):1  PERCENT HYDROPHYTES (10)  HYDROLOGY  RECORDED DATA Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification:  NO RECORDED DATA  NO RECORDED DATA  OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): ≥20" | FAC-<br>Non-hydropl | FACU UI hytes Subtotal (1 | B):         | inage Patterns |

| SOIL-Sketc   | ch landscape posi   | tion of this p                            | ot. Indic   | ate relat | tive position of other plot(s) a                         | and the wetland flag if not on plan.   |
|--|---|---|-------------|-----------|--|--|
| Submission of p  | hoto of plot is ence  | ouraged. PLF                              | ASE RI      | EFER '    | TO APPENDIX B, PHO                                       | TO #10   |
| DEPTH  | Horizon   | MATRIX                                    |             |           | REDOXIMORPHIC EATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-2"   | A   | 205Y                                      | 3/1         |           | -  | silty loam, granular   |
| 2-10"  | A   | 2.5Y                                      | 3/1         |           | 10YR 3/3, 5, 2-10, d                                     | silty loam w/some gravel   |
| 10-20"   | C   | 2.5Y                                      | 3/1         | pre       | •  | sandy loam w/much gravel   |
|  |   |   |             |           |  | and cobble   |
| Soil does not<br>Development<br>P-01. Dark v<br>characteristic | INDICATOR(S): technically me t of hydric chara veathering soil: s. OIL DATA M | et NEHSTC<br>acteristics st<br>may be mas | ronger th   | nan in    |  |  |
|  |   |   |             |           | REFERENCE(S):  |  |
| Taxonomic subj   |   |   |             |           |  |  |
| Soil drainage cla<br>Depth to active                           |   |   |             |           |  |  |
| NTCHS hydric   |   |   |             |           |  |  |
| CONCLU   | ISIONS  |   |             |           |  |  |
| COLICE   | NA CATE   |   | YES         | No        | REMARKS:   |  |
|  |   |   |             |           | REWARKS.   |  |
| Hydric veget   |   |   |             |           |  |  |
| Wetland hyd  | rology met?   |   | $\boxtimes$ |           |  |  |
| Hydric soils   | criterion met?  |   |             |           | See discussion above; streelsewhere in this wetland      | rong hydric characteristics<br>d where veg. is similar.  |
| IS THIS DATA   | APOINT IN A WE  | TLAND?                                    | $\boxtimes$ | П         | Prevalence of FACW+ v                                    | veg, considered.   |
| 20 I IIIO DITTI  | _ January III   |   |             |           |  |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4C-(P)-02

TRANSECT: N/A

PLOT: TF4C-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 12, 2002

Upland

LOCATION: 75 FT. BEHIND BLOCK BUILDING

| VEGETATION  |   |                      |             |               |
|---|---|----------------------|-------------|---------------|
| STRATUM AND SPECIES   | DOMINANCE<br>RATIO                      | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Shrubs  |   |                      |             |               |
| Elaeagnus umbellata   | 5/15                                    | 33                   | X           | HUE NE        |
| Rubus idaeus ?  | 10/15                                   | 66                   | X           | FAC-          |
| Herbs   |   |                      |             |               |
| Solidago rugosa   | 60/100                                  | 60                   | X           | FAC           |
| Euthamia tenuifolia   | 20/100                                  | 20                   | X           | FACU          |
| Juncus effusus  | 20/100                                  | 20                   | X           | FACW+         |
|   |   |                      |             |               |
|   | 100000000000000000000000000000000000000 |                      |             |               |
|   |   |                      |             |               |
| HYDROPHYTES   | Non-Hydrophy                            | VTEQ                 |             |               |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 2  PERCENT HYDROPHYTES ( | FAC- F                                  | FACU UP              |             |               |

| <b>HYDROLOGY</b>                                      |                            | A A A            | 3                 |                                    |
|---|----------------------------|------------------|-------------------|------------------------------------|
| □ RECORDED DATA                                       |                            |                  |                   |                                    |
| Stream, lake, or tidal gage                           | Identification:            |                  |                   |                                    |
| Aerial photography                                    | Identification:            |                  |                   |                                    |
| Other   | Identification:            |                  |                   |                                    |
|   |                            |                  |                   |                                    |
| ○ OBSERVATIONS  |                            |                  |                   |                                    |
| Depth to Free Water:                                  |                            |                  |                   |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expla | uding capillary fringe): > | <u>5"</u>        |                   |                                    |
| _   | turated in Water M         | arks Drift Lines | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| ☐ OTHER (explain):                                    |                            |                  |                   |                                    |
| -   |                            |                  |                   |                                    |
|   |                            |                  |                   |                                    |

| SUIL-Sketc   | en landscape posi                     | tion of this pl | ot. Indi | cate rela | tive position of other plot(s) and                      | d the wetland flag if not on plan.   |
|--|---------------------------------------|-----------------|----------|-----------|---|--|
| Submission of p  | hoto of plot is enco                  | ouraged. PLE    | ASE R    | EFER      | TO APPENDIX B, PHOTO                                    | D#11   |
| DEPTH  | Horizon                               | MATRIX          |          | R         | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-7"   | A                                     | 10YR            | 3/2      |           |   | loam, granular   |
| 7-15"  | В                                     | 2.5Y            | 3/2      |           | 10YR3/4, 5%, 2-5,d                                      | silty loam, blocky, some   |
|  |                                       |                 |          |           |   | granular and cobble  |
| 15"+   |                                       |                 |          |           |   | much cobble  |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 |          |           |   |  |
| 1136 118   |                                       |                 |          |           |   |  |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 |          | -         |   |  |
|  |                                       |                 |          |           |   | THE RESERVE OF THE PARTY AND ADDRESS OF THE PA |
|  |                                       |                 |          |           |   |  |
|  |                                       |                 | -        |           |   |  |
|  |                                       |                 |          |           |   |  |
| Does not mee   | . INDICATOR(S):<br>et technical crite | eria of NEHS    | STC (19  | 998).     | REFERENCE(S):   |  |
| OPTIONAL S   | OIL DATA Ma                           | apped UD        |          |           | Decemence(c).   |  |
| Taxonomic subjection Soil drainage classification Depth to active NTCHS hydric | ass:<br>water table:                  |                 |          |           | REFERENCE(S):   |  |
| NTCTIS Hydric  | son criterion.                        |                 | _        |           |   |  |
| CONCLU   | ISIONS                                |                 |          |           |   |  |
|  |                                       |                 | YES      | No        | REMARKS:  |  |
| Hydric veget   | ation met?                            |                 |          |           | Plant ID uncertain.                                     |  |
|  |                                       |                 |          |           | Tame ID uncorum.  |  |
| Wetland hyd  |                                       |                 |          | 1000      |   |  |
| Hydric soils   | criterion met?                        |                 |          |           |   |  |
| Is This Data   | APOINT IN A WE                        | TLAND?          |          |           |   |  |
|  |                                       |                 |          |           |   |  |
| PROJECT TIT  | LE: NAVSTA                            | NEWPORT V       | VETLAN   | D DELI    | NEATION TRANSECT: N                                     | N/A <u>PLOT</u> : TF4C-(P)-03  |

TRANSECT: N/A

PLOT: TF4C-(P)-04

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 12, 2002

Wetland

LOCATION: 75 FT. BEHIND BLOCK BUILDING

| VEGETATION   | 1-24               |                      | D      | The state of  |
|--|--------------------|----------------------|--------|---------------|
| STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | O<br>M | NWI<br>STATUS |
| Shrubs   |                    |                      |        |               |
| Salix discolor   | 50/75              | 66                   | X      | FACW          |
| Elaeagnus umbellata  | 5/75               | 7                    |        | - 4           |
| Rosa multiflora  | 20/75              | 20                   | X      | FACU          |
| <u>Herbs</u>   |                    |                      |        |               |
| Juncus effusus   | 40/45              | 88                   | X      | FACW+         |
| Typha latifolia  | 5/45               | 11                   |        | OBL           |
|  |                    |                      |        |               |
|  |                    |                      |        |               |
|  |                    |                      |        |               |
|  |                    |                      |        |               |
|  |                    |                      |        | 4             |
| HYDROPHYTES  | Non-Hydrophy       | TES                  |        |               |
| 2 74 CW 74 CW  |                    | 1                    | _      |               |
| OBL FACW FAC *OTHER  | FAC- F             | ACU UP               | L      |               |
| Hydrophytes Subtotal (A):2   | Non-hydrophyte     | es Subtotal (B):_    | _1_    | _ : P         |
| PERCENT HYDROPHYTES  | (100A/A+B):66      |                      |        |               |
| The second secon |                    |                      | - IN   | and the stage |

| HYDROLOGY   |                        | The state of the s | 1 1 1         |                   |                                    |
|---|------------------------|--|---------------|-------------------|------------------------------------|
| ☐ RECORDED DATA                                       |                        |  |               |                   |                                    |
| Stream, lake, or tidal gage                           | Identifica             | tion:  |               |                   |                                    |
| Aerial photography                                    | Identifica             | tion:  |               |                   |                                    |
| Other   | Identifica             | tion:  |               |                   |                                    |
| ☑ No Recorded Data                                    |                        |  |               |                   |                                    |
| ○ OBSERVATIONS  |                        |  |               |                   |                                    |
| Depth to Free Water:                                  |                        |  |               |                   |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expla |                        | ary fringe): >16"  |               |                   |                                    |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1              | turated in<br>oper 12" | ☐ Water Marks  | ☐ Drift Lines | Sediment Deposits | □ Drainage Patterns within Wetland |
| ☐ OTHER (explain):                                    |                        |  |               |                   |                                    |
|   |                        | A PA   |               |                   |                                    |
|   |                        |  |               |                   |                                    |

| <b>DEPTH</b> 0-8"                     | nto of plot is enco | uraged. PLE |             |      |   |  |
|---------------------------------------|---------------------|-------------|-------------|------|---|--|
| <b>D</b> ЕРТН 0-8"                    |                     |             | ASE RI      | EFER | TO APPENDIX B, PHOTO                                    | D#11   |
|                                       | HORIZON             | MATRIX (    |             | R    | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
|                                       | A                   | 2.5Y4       | -           |      | 10YR3/4, 5%, 2-5, P                                     | silty loam, blocky   |
| 8-16"                                 |                     | 10YR        | 3/2         |      | 10YR3/4, 5%, 2-5, d                                     | silty loam, blocky   |
|                                       |                     |             |             |      |   | some gravel  |
| 16"+                                  |                     |             |             |      |   | argillite cobble   |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   |  |
|                                       |                     |             |             |      |   | S.Zap a Managarahan p  |
| HYDRIC SOIL II                        | NDICATOR(S):        |             |             |      | REFERENCE(S):<br>NEHSTC (1998)                          |  |
| OPTIONAL SO                           |                     | apped UD    |             | 1    | REFERENCE(S):   |  |
| Taxonomic subgro                      |                     |             |             |      |   |  |
| Soil drainage class                   |                     |             |             |      |   |  |
| Depth to active wa<br>NTCHS hydric so |                     |             |             |      |   |  |
| Nicion njane se                       | II CHICKIOII        |             |             |      |   |  |
| CONCLUS                               | ZIONS               |             |             |      |   |  |
| CONCLU                                | IONS                |             | YES         | No   | REMARKS:  |  |
| Hydric vegetat                        | ion met?            |             | $\boxtimes$ |      |   |  |
| Wetland hydro                         |                     |             | $\boxtimes$ |      |   |  |
| Hydric soils cr                       |                     |             | $\boxtimes$ |      |   |  |
|                                       |                     |             | 1000000     |      |   |  |
| IS THIS DATAP                         | OINT IN A WE        | TLAND?      |             |      |   |  |

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TRANSECT: N/A

PLOT: TF4C-(P)-05

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 12, 2002

Wetland

LOCATION: NEAR SE CORNER

| VEGETATION  | 1/1/4              | The same of the same |        |               |
|---|--------------------|----------------------|--------|---------------|
| STRATUM AND SPECIES                                       | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | O<br>M | NWI<br>STATUS |
| <u>Herbs</u>  |                    |                      |        | Les H         |
| Juncus effusus  | 50/100             | 50                   | X      | FACW+         |
| Euthamia tenuifolia                                       | 20/100             | 20                   | X      | FACU          |
| Juncus tenuis   | 20/100             | 20                   | X      | FAC-/<br>FACW |
| Festuca pratensis ? (no fruit)                            | 10/100             | 10                   |        | FACU-         |
| NWI status for J. tenuis depends on variety. Assumed FACW |                    |                      |        |               |
|   |                    |                      |        |               |
|   |                    |                      |        | - 500         |
| Hydrophytes   | Non-Hydroph        | YTES                 |        |               |
| OBL FACW FAC *OTHER                                       | FAC-               | FACU UP              | L      |               |
| Hydrophytes Subtotal (A): 2                               | Non-hydrophyte     | es Subtotal (B):_    | _1_    | -             |
| PERCENT HYDROPHYTE  | es (100A/A+B): 66  |                      |        |               |

| Identification | n:                            |                         |  |   |
|----------------|-------------------------------|-------------------------|--|---|
| Identification | n:                            |                         |  |   |
| Identification | on:                           |                         |  |   |
|                |                               |                         |  |   |
|                |                               |                         |  |   |
|                |                               |                         |  |   |
|                | fringe): ≥14"                 |                         |  |   |
|                | Water Marks                   | ☐ Drift Lines           | Sediment Deposits  | Drainage Patterns within Wetland  |
|                |                               |                         |  |   |
|                | Identification Identification | aturated in Water Marks | Identification: Identification:  luding capillary fringe): ≥14" lain):  atturated in □ Water Marks □ Drift Lines | Identification:  Identification:  luding capillary fringe): ≥14"  lain):  atturated in □ Water Marks □ Drift Lines □ Sediment |

| Submission of pl   | hoto of plot is enc  | ouraged. PL | EASE RI | EFER | TO APPENDIX B, PHOTO                                      | O #12  |
|--|----------------------|-------------|---------|------|---|--|
| DEPTH  | HORIZON              | MATRIX      |         | R    | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-5"   | A                    | Gley 1, 2   | .5Y/10Y |      | 10YR3/3, 5%, 1-5, d                                       | loam, blocky/platy   |
| 5 1 422  | 0                    |             |         |      |   | w/much gravel  |
| 5-14"  | С                    |             |         |      |   | loam w/much gravel and   |
|  |                      |             |         |      |   | cobble phyllite  |
|  |                      |             |         |      | - L460  |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         |      |   |  |
|  |                      |             |         | 200  |   |  |
| HYDRIC SOIL<br>IIID  | INDICATOR(S):        |             |         |      | REFERENCE(S):<br>NEHSTC (1998)                            |  |
| OPTIONAL SO  | OIL DATA M           | Sapped UD   |         |      | Reference(s):   |  |
| Taxonomic subg<br>Soil drainage cla<br>Depth to active v<br>NTCHS hydric s | ass:<br>water table: |             |         |      |   |  |
| CONCLU   | SIONS                |             |         |      |   |  |
| 001,025  | DIOILE               |             | YES     | No   | REMARKS: .  |  |
| Hydric vegeta  | ation met?           |             |         |      | See note in vegetation se                                 | ection   |
| Wetland hydr   |                      |             |         |      |   |  |
| ***  |                      |             |         |      |   |  |
| Hydric soils o   | riterion met?        |             |         |      |   |  |

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 PROJECT TITLE:
 NAVSTA NEWPORT WETLAND DELINEATION
 TRANSECT: N/A
 PLOT:
 NB-(P)-01

 DELINEATOR(S):
 G. METZLER (TEC), M. NARCHI (TEC)
 DATE:
 NOV 10, 2002
 Wetland

LOCATION: NEAR ROAD

| VEGETATION                     |                    |                      | D      |               |
|--------------------------------|--------------------|----------------------|--------|---------------|
| Com Agrand Axin Concorns       | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | O<br>M | NWI<br>STATUS |
| STRATUM AND SPECIES Shrubs     | KAHO               | DOMINANCE            | IVI    | SIAIUS        |
| Viburnum dentatum var. lucidum | 10/147             | 7                    |        | FACW          |
| Rosa multiflora                | 75/147             | 51                   | X      | FACU          |
| Lonicera morrowii              | 2/147              | 1                    | Λ      | FACU          |
|                                |                    | 172                  | v      |               |
| Alnus incana                   | 60/147             | 41                   | X      | FACW          |
|                                |                    |                      |        |               |
|                                |                    |                      |        |               |
|                                |                    |                      |        |               |
|                                |                    | 10000                |        | - 79          |
|                                |                    |                      |        |               |
|                                |                    |                      |        |               |
|                                |                    |                      |        |               |
| HYDROPHYTES                    | Non-Hydrophy       | TES                  |        |               |
|                                |                    | 1                    |        |               |
| OBL FACW FAC *OTHER            | FAC- F             | ACU UP               | L      |               |
| Hydrophytes Subtotal (A):1     | Non-hydrophytes    | s Subtotal (B):      | 1      |               |
| PERCENT HYDROPH                | YTES (100A/A+B): 5 | 0                    |        |               |
| PERCENT HYDROPH                | YTES (100A/A+B): 5 | 0                    |        |               |

| HYDROLOGY   |                    | NAME OF TAXABLE PARTY. |               |                   |                                 |
|---|--------------------|------------------------|---------------|-------------------|---------------------------------|
| ☐ RECORDED DATA                                       |                    |                        |               |                   |                                 |
| Stream, lake, or tidal gage                           | Identification     | 1:                     |               |                   |                                 |
| Aerial photography                                    | Identification     | 1:                     |               |                   |                                 |
| Other   | Identification     | 1:                     |               |                   |                                 |
|   |                    |                        |               |                   |                                 |
| ○ OBSERVATIONS  |                    |                        |               |                   |                                 |
| Depth to Free Water:                                  |                    |                        |               |                   |                                 |
| Depth to Saturation (incl<br>Altered Hydrology (expla |                    | ringe): >17"           |               |                   |                                 |
|   | turated in per 12" | Water Marks            | ☐ Drift Lines | Sediment Deposits | ainage Patterns<br>thin Wetland |
| ☐ OTHER (explain):                                    |                    |                        |               |                   |                                 |

|  |                      |   |        |   | d the wetland flag if not on plan.   |
|--|----------------------|---|--------|---|--|
| vertical   |                      | ween plots: 0.5'  | _      | P-2   |  |
| ubmission of n   | hoto of plot is enc  |   |        |   |  |
| DEPTH  | HORIZON              | MATRIX COLOR  |        | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-9"   | A                    | 10YR3/2   |        | -   | loam, granular   |
| 9-12"  | C                    | Gley 1 2.5Y/10  |        |   | gravelly/cobbly, sandy loam;   |
|  |                      |   |        |   | color due to weathering phyllite   |
| 12-17"   | С                    | 2.5Y5/2   | 10     | YR4/3 (40%),1-2mm, d to f                                 | silty loam, blocky   |
|  |                      |   |        |   |  |
|  |                      |   |        |   |  |
|  |                      |   |        |   |  |
|  |                      |   |        |   |  |
| Grey color du<br>neeting crite   | ria IIIE NEHS        | :<br>rock. Comes very<br>ΓC (1998). This lo<br>from drainage to the | cation |   |  |
| PTIONAL S  | OIL DATA M           | apped Se (hydric  | )      |   | 18 ( A 1 ) A 2 ( L   |
| axonomic subsolid drainage classified bepth to active of the street of t | ass:<br>water table: |   |        | REFERENCE(S):   |  |
|  | Mar N                |   |        |   |  |
| CONCLU   | SIONS                | YES   | No     | REMARKS:  |  |
| Tydric veget   | ation met?           |   |        |   | iflora rose has eliminated other   |
| Wetland hyd  | rology met?          |   |        |   |  |
|  | criterion met?       |   |        | See discussion in soils                                   |  |
| Tyuric sons  | criterion met?       | ETLAND?   |        | Overall professional judam                                | ent used to determine this location  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: NB-(P)-01

PLOT: NB-(P)-02 PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC) DATE: Nov 10, 2002 Upland LOCATION: VEGETATION D 0 DOMINANCE PERCENT NWI DOMINANCE M RATIO STATUS STRATUM AND SPECIES Shrubs Rosa multiflora 100/100 FACU 100 HYDROPHYTES NON-HYDROPHYTES FACW FAC FAC-**FACU** UPL OBL \*OTHER Hydrophytes Subtotal (A): 0 Non-hydrophytes Subtotal (B): \_\_\_1\_\_\_ PERCENT HYDROPHYTES (100A/A+B): 0 HYDROLOGY □ RECORDED DATA Identification: Stream, lake, or tidal gage Identification: Aerial photography Other Identification: ○ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): >18" Altered Hydrology (explain): Inundated Saturated in ■ Water Marks ☐ Drift Lines Sediment □ Drainage Patterns upper 12" within Wetland Deposits ☐ OTHER (explain):

|  | t NB-(P)-01  |              |   |   |
|--|--|--------------|---|---|
| abmission of p   | hoto of plot is enc  | ouraged.     |   |   |
| DEPTH  | Horizon  | MATRIX COLOR | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers root distribution, soil water, etc.) |
| 0-8"   | A  | 10YR3/2      |   | silty loam, granular  |
| 8-17"  | C  | 10YR3/2      |   | silty loam, blocky  |
|  |  |              |   | gravel and cobble   |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   | Barrelle III (A)  |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   |   |
|  |  |              |   |   |
|  | TINDICATORIO   | •            | REFERENCE(S):   |   |
|  |  |              |   |   |
| OPTIONAL S   | OIL DATA   |              | Reference(s):   |   |
|  | OIL DATA group:  |              | REFERENCE(S):   |   |
| PATIONAL S  axonomic subpoil drainage classical dra | group: ass: water table:                                   |              | Reference(s):   |   |
| PATIONAL S  Caxonomic subplicit drainage classes of the control of | group: ass: water table:                                   |              | REFERENCE(S):   |   |
| DPTIONAL S  Taxonomic subposited drainage classification of the sective of the sective of the sective of the sective of the section of the se | group: ass: water table: soil criterion:                   |              | REFERENCE(S):   |   |
| DPTIONAL S  Taxonomic substantial depth to active of the section o | group: ass: water table: soil criterion:                   | YES          | REFERENCE(S):  No Remarks:                                |   |
| axonomic subsoil drainage classification of the active of TCHS hydric second control of the active o | group: ass: water table: soil criterion:                   | YES          |   |   |
| axonomic subsoil drainage classic pepth to active TCHS hydric second and the total control of | group: ass: water table: soil criterion: USIONS ation met? |              | No Remarks:   |   |
| Deptional S Faxonomic subposition of the second subposition of the sec | group: ass: water table: soil criterion: USIONS ation met? |              | No Remarks: ⊠   |   |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: NB-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

DATE: NOV 10, 2002

Upland

LOCATION:

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
|--|--------------------|----------------------|-------------|---------------|
| Trees  | 55-71              |                      |             | - THEE        |
| Salix nigra (DBHs: 18,18)  | 509/509            | 100                  | X           | FACW+         |
| Shrubs   |                    |                      |             | THE BUILD     |
| Rosa multiflora  | 75/85              | 88                   | X           | FACU          |
| Lonicera morrowii  | 10/85              | 12                   |             | FACU          |
|  | 100                |                      |             |               |
|  |                    |                      |             |               |
|  |                    |                      |             |               |
|  |                    |                      |             |               |
|  |                    |                      |             |               |
| HYDROPHYTES  | Non-Hydrophy       | 1                    |             |               |
| OBL FACW FAC *OTHER  | FAC- F             | ACU UP               | L           |               |
| Hydrophytes Subtotal (A):1   | Non-hydrophyte     | es Subtotal (B):_    | 1_          | -             |
| PERCENT HYDROPHYTES (1   | 00A/A+B):50        |                      |             |               |
| HYDROLOGY  |                    |                      |             |               |
| ☐ RECORDED DATA  |                    |                      |             |               |
| Stream, lake, or tidal gage Identification:  Aerial photography Identification:                            |                    |                      |             |               |
| Aerial photography Identification:  Other Identification:  |                    |                      |             |               |
| No Recorded Data   |                    |                      |             |               |
|  |                    |                      |             |               |
|  |                    |                      |             |               |
| Denth to Free Water  |                    |                      |             |               |
| Depth to Free Water:  Depth to Saturation (including capillary fringe): >20"  Altered Hydrology (explain): |                    |                      |             |               |
|  | ☐ Drift Lines [    | Sediment [Deposits   |             | inage Patterr |

|  |   | plot to top of bank | . 0.5 | P-3   | Brook  |
|--|---|---------------------|-------|---|--|
| 1  | hata afalat ia ana  |                     |       | East  |  |
| iomission of pr  | hoto of plot is enco  | ouraged.            |       |   | COMMENTS   |
| DEPTH  | Horizon   | MATRIX COLOR        |       | DOXIMORPHIC FEATURES<br>lor, abundance, size, contrast) | (USDA texture, nodules, concretions<br>masses, pore linings, restrictive layer<br>root distribution, soil water, etc.) |
| 0-6"   | A   | 10YR3/2             |       |   | silty loam, granular   |
| 6-15"  | В   | 2.5Y5/3             |       |   | silty loam w/much gravel to  |
|  |   |                     |       |   | cobble size phyllite   |
| 15-20"   | В   | 2.5Y4/2             |       |   | (some beginning to weather)  |
| 13-20  | В   | 2.3 14/2            |       |   | sandy loam w/fragment rock   |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
|  |   |                     |       |   |  |
| YDRIC SOIL   | INDICATOR(S):   |                     |       | REFERENCE(S):   |  |
|  |   |                     |       | REFERENCE(S):   |  |
| PTIONAL SO   | OIL DATA  |                     |       | REFERENCE(S):  REFERENCE(S):                            |  |
| PTIONAL SO   | OIL DATA group:   |                     |       |   |  |
| OPTIONAL SO<br>axonomic subg<br>oil drainage cla   | OIL DATA group:   |                     |       |   |  |
| PTIONAL SO   | OIL DATA group: uss: water table:                                   |                     |       |   |  |
| Axonomic subgoil drainage cla  | OIL DATA group: uss: water table:                                   |                     |       |   |  |
| Axonomic subgoil drainage cla  | OIL DATA  group: uss: water table: soil criterion:                  |                     |       |   |  |
| axonomic subgoil drainage classepth to active was TCHS hydric s  | roup: uss: water table: soil criterion:                             | YES                 |       |   |  |
| exonomic subgoil drainage cla<br>epth to active v  | roup: uss: water table: soil criterion:                             |                     |       | REFERENCE(S):   |  |
| axonomic subgoil drainage claepth to active was TCHS hydric second by the control of the control | oil DATA group: ass: water table: soil criterion:  SIONS ation met? | YES                 |       | REFERENCE(S):   |  |
| axonomic subgoil drainage claepth to active vertex by the concept of the concept  | oil DATA group: ass: water table: soil criterion:  SIONS ation met? | YES                 |       | REFERENCE(S):   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: NB-(P)-04

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC) DATE: Nov 11, 2002 Wetland

LOCATION: NEAR SW EDGE OF NB WETLANDS IN FROM ROAD – 500 FT.

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE          | D<br>O<br>M | NWI<br>STATUS               |
|--|--------------------|-------------------------------|-------------|-----------------------------|
| Shrubs   | 100                |                               |             | Jim I                       |
| Alnus incana   | 75/100             | 75                            | X           | FACW                        |
| Viburnum dentatum var. lucidum   | 15/100             | 15                            |             | FACW-                       |
| Rosa multiflora  | 10/100             | 10                            |             | FACU                        |
| <u>Herbs</u>   |                    |                               |             |                             |
| Rubus hispidis   | 5                  |                               |             | FACW                        |
|  |                    |                               |             |                             |
| Hydrophytes  | Non-Hydrophy       | YTES                          |             |                             |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (19  | Non-hydrophyte     |                               |             | -                           |
| HYDROLOGY  |                    | A POST OF THE PERSON NAMED IN |             |                             |
| <ul> <li>□ RECORDED DATA         <ul> <li>Stream, lake, or tidal gage</li> <li>Identification:</li> <li>Other</li> <li>Identification:</li> </ul> </li> <li>□ NO RECORDED DATA</li> <li>□ OBSERVATIONS         <ul> <li>Depth to Free Water: 18"</li> <li>Depth to Saturation (including capillary fringe): 11"</li> <li>Altered Hydrology (explain):</li> </ul> </li> </ul> |                    |                               |             |                             |
| Aftered Hydrology (explain):  ☐ Inundated ☐ Saturated in upper 12"  ☐ OTHER (explain):   | ☐ Drift Lines ☐    | Sediment [Deposits            |             | inage Patter<br>hin Wetland |

| Vertical   |  |              | ot. maic       |         |   | d the wetland | d flag if not on plan.  |
|--|--|--------------|----------------|---------|---|---------------|---|
| · ortical  | Distance betw  | veen plots:  | 1'             |         |   | P-5           |   |
|  |  |              |                | Brool   | P-4   | P-3           | - South   |
| Submission of pl   | hoto of plot is enco   | uraged.      |                | 21001   |   |               |   |
| DEPTH  | Horizon  | MATRIX       | Color          |         | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | masses, p     | COMMENTS exture, nodules, concretions, ore linings, restrictive layers, stribution, soil water, etc.) |
| 1-0"   | 0  |              |                |         |   |               |   |
| 0-20"  | A  | Gley 1       | 3/10Y          |         |   | -             | oam w/much gravel and   |
|  |  |              |                |         |   |               | color due to weathered<br>te; small inclusions of   |
|  |  |              |                |         |   | -             | 3/1 throughout profile  |
| a second   |  |              |                |         |   | 2.51.         | or anoughout prome  |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
| 25 M   |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              |                |         |   |               |   |
|  |  |              | Sec. 1         | 100     |   |               |   |
|  |  |              |                |         | REFERENCE(S):   |               |   |
| Color due to   | INDICATOR(S):<br>weathered rock;<br>characteristics.   |              | nay be r       | masking |   |               |   |
| Color due to<br>other hydric o   | weathered rock;<br>characteristics.  | this color r |                |         |   |               |   |
| Color due to<br>other hydric o   | weathered rock;<br>characteristics.  |              |                |         | 3   |               |   |
| Color due to other hydric of OPTIONAL S  | weathered rock;<br>characteristics.  | this color r |                |         |   |               |   |
| Color due to other hydric of OPTIONAL S  | weathered rock; characteristics.  OIL DATA M group:  | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subg   | weathered rock; characteristics.  OIL DATA M group: ass:   | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subg Soil drainage cla   | weathered rock; characteristics.  OIL DATA M group: ass: water table:                                    | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subg Soil drainage cla   | weathered rock; characteristics.  OIL DATA M group: ass: water table:                                    | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subsection of the control of  | weathered rock; characteristics.  OIL DATA M group: ass: water table: soil criterion:                    | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subsection of the control of  | weathered rock; characteristics.  OIL DATA M group: ass: water table: soil criterion:                    | this color r |                |         | 3   |               |   |
| OPTIONAL S  Taxonomic subsection of the subsecti | weathered rock; characteristics.  OIL DATA M group: ass: water table: soil criterion:                    | this color r | hydric)        |         | REFERENCE(S):   |               |   |
| Color due to other hydric of the hydric of t | weathered rock; characteristics.  OIL DATA M group: ass: water table: soil criterion:  USIONS ation met? | this color r | hydric)<br>YES | No      | REFERENCE(S):   |               |   |
| OPTIONAL S  Taxonomic subsection of the subsecti | weathered rock; characteristics.  OIL DATA M group: ass: water table: soil criterion:  USIONS ation met? | this color r | hydric)  Yes   | No 🗆    | REFERENCE(S):   |               |   |

PLOT: NB-(P)-04

TRANSECT: N/A

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: NB-(P)-05

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

DATE: NOV 11, 2002

Upland

LOCATION:

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO           | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS                |
|--|------------------------------|----------------------|-------------|------------------------------|
| Shrubs   | Walan -                      |                      |             | TEN                          |
| Alnus incana   | 5/85                         | 6                    |             | FACW                         |
| Viburnum dentatum var. lucidum   | 75/85                        | 88                   | X           | FACW-                        |
| Rosa multiflora  | 5/85                         | 6                    |             | FACU                         |
| Trees  |                              |                      |             |                              |
| Abies balsamea (DBHs: 6,8)   | 79/158                       | 50                   | X           | FAC                          |
| Prunus serotina (DBH: 10)  | 79/158                       | 50                   | X           | FACU                         |
|  |                              |                      |             |                              |
| Hydrophytes  | Non-Hydroph                  | YTES                 |             |                              |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 2   | Non-hydrophyte               | FACU UP              |             |                              |
| PERCENT HYDROPHYTES  HYDROLOGY   | (100A/A+B)00                 | Toka si              | 147         |                              |
| ■ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification:  NO RECORDED DATA  OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): >20" (s | soil moist only at this dept | <u>h)</u>            |             |                              |
| Altered Hydrology (explain):  Inundated Saturated in upper 12"  OTHER (explain):   | ☐ Drift Lines [              | Sediment [Deposits   |             | inage Pattern<br>hin Wetland |

| See Plot N   |  |          |            |         |   | the wetland flag if not on plan.   |
|--|--|----------|------------|---------|---|--|
| Sec Flot I   | NB-(P)-04  |          |            |         |   |  |
| Submission of p  | hoto of plot is enco                               | ouraged. |            |         |   |  |
| DEPTH  | HORIZON  | MATRIX   | COLOR      |         | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-20"  | A  | Gley 1   | 3/10Y      |         | -   | sandy loam w/much gravel and   |
|  |  |          |            |         |   | cobble; phyllite weathering  |
|  |  |          |            |         |   | to soil color observed   |
| 372-130  |  |          |            |         |   |  |
|  |  |          |            |         |   |  |
|  |  |          |            | + 4     |   |  |
|  |  |          |            |         |   |  |
|  |  |          |            |         |   |  |
|  |  |          |            |         |   |  |
|  | INDICATOR(S)                                       |          | oaler um a | radient | REFERENCE(S):   |  |
| Soil color pro<br>about 20 ft. h<br>throughout pr  | igher in elevati                                   |          |            |         |   |  |
| about 20 ft. h   | igher in elevati<br>rofile.                        |          |            |         |   |  |
| about 20 ft. h<br>throughout pr  | oil DATA group: ass: water table:                  |          |            |         | Reference(s):   |  |
| OPTIONAL S  Taxonomic subg Soil drainage cli Depth to active NTCHS hydric  | oil DATA  group: ass: water table: soil criterion: |          |            |         |   |  |
| OPTIONAL S  Taxonomic substantial drainage clippth to active   | oil DATA  group: ass: water table: soil criterion: |          |            |         |   |  |
| about 20 ft. h throughout properties of the control | oil DATA group: ass: water table: soil criterion:  |          | soil colo  |         | Reference(s):   |  |
| about 20 ft. h throughout pr  OPTIONAL S  Taxonomic subg Soil drainage cl Depth to active NTCHS hydric   | oil DATA group: ass: water table: soil criterion:  |          | YES        | No      | Reference(s):   |  |
| about 20 ft. h throughout properties of the control | oil DATA group: ass: water table: soil criterion:  |          | YES        | No      | Reference(s):   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: NB-(P)-05

TRANSECT: N/A

PLOT: TF4N-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE: OCT 18, 2002** 

Wetland

LOCATION: NE OF ACCESS GATE IN DISTURBED MOWED AREA

| VEGETATION  STRATUM AND SPECIES   | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS                 |
|---|--------------------|----------------------|-------------|-------------------------------|
| Shrubs  |                    |                      |             |                               |
| Rosa multiflora   | 20/42              | 48                   | X           | FACU                          |
| Viburnum dentatum var. lucidum  | 20/42              | 48                   | X           | FACW-                         |
| Lonicera morrowii   | 2/42               | 5                    |             | FACU                          |
| Herbs   |                    |                      |             |                               |
| Rumex crispus   | 2/74               | 3                    |             | FACU                          |
| Fescue sp. (no fruit)   | 70/74              | 95                   | X           |                               |
| Acalypha rhomboidea   | 2/74               | 3                    |             | FACU-                         |
| HYDROPHYTES   | Non-Hydrophy       |                      |             |                               |
| OBL   | Non-hydrophyte     | ACU UPI              |             |                               |
| HYDROLOGY  □ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: □ NO RECORDED DATA □ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): >20" Altered Hydrology (explain): |                    |                      |             |                               |
| ☐ Inundated ☐ Saturated in ☐ Water Marks upper 12"  ☐ OTHER (explain): Ruts present from vehicles; appears to   | ☐ Drift Lines ☐    | Sediment<br>Deposits |             | inage Patterns<br>hin Wetland |

| Vertical Distance from plot to top of ditch: <0.5'  Road  Submission of photo of plot is encouraged.  COMMENTS  COMMENTS  COMMENTS  COMMENTS  (USDA texture, contrast) pore linings, restrictive layers, not distribution, soil water, etc.) loam, many roots, blocky, fill 12-20" B 574/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky, fill 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky, fill 12-20" Note: possibly old fill  Note: possibly old fill  Note: possibly old fill  Phydric Soil Indicators(s): REFERENCE(s): NEHSTC (1998)  REFERENCE(s): Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Soil drainage class: Syer No REMARKS: Soil drainage class: Used and hydrology met? Soil drainage class: Syer No REMARKS: Syer No Syer No REMARKS: Syer No Syer No Syer No Syer | Road   COMMENTS   COMMENTS   COMMENTS   COMMENTS   Cooker, abundance, size, contrast)   Comment   Commen | SOIL-Sketo   | ch landscape posi    | tion of this p   | olot. Indic | cate rela | tive position of other plot(s) and | d the wetland flag if not on plan.   |
|--|--|--|----------------------|--|-------------|-----------|------------------------------------|--|
| COMMENTS    | Submission of photo of plot is encouraged.    COMMENTS   | Vertical   | Distance from        | n plot to to   | p of dit    | ch: <0.   | .5' [P-1]                          |  |
| DEPTH  | DEPTH HORIZON MATRIX COLOR  REDOXIMORPHIC FEATURES (USDA texture, nodules, concertions, masses pore limings, restrictive layers, root distribution, soil water, etc.)  10-6" A 10YR3/2 - loam, abundance, size, contrast)  10-6-12" B 5Y4/1 10YR4/6, (10%), 2-5mm, d loam, blocky, fill 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky, fill 10-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  Note: possibly old fill  REFERENCE(S):  NEHSTC (1998)  OPTIONAL SOIL INDICATOR(S): REFERENCE(S):  Taxonomic subgroup: Soil drainage class:  Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS:  Hydric vegetation met?  |  |                      |  | Road        | 1         |                                    |  |
| DEPTH  | DEPTH  | Submission of p  | hoto of plot is enco | uraged.  |             |           |                                    | A STATE OF STREET AS A STATE OF STREET   |
| 6-12" B 5Y4/1 10YR4/6, (10%), 2-5mm, d loam, blocky, fill 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  Note: possibly old fill  Prypric Soil. Indicators(s): Reference(s): NeHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  Yes No Remarks:  Hydric vegetation met?   | B   SY4/1   10YR4/6, (10%), 2-5mm, d   loam, blocky, fill   12-20"   B   7.5YR3/1   10YR3/3, (3-5%), 1-5mm, d   loam, blocky   fill   loam, blocky   fill   loam, blocky   fill   loam, blocky   fill   loam, blocky   | THE STATE OF THE S |                      | The state of the s |             |           |                                    | (USDA texture, nodules, concretions, masses,<br>pore linings, restrictive layers, root<br>distribution, soil water, etc.)  |
| 6-12" B 5Y4/1 10YR4/6, (10%), 2-5mm, d loam, blocky, fill 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  REFERENCE(S): NEHSTC (1998)  OPTIONAL SOIL INDICATOR(S): REFERENCE(S): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  | 6-12" B 5Y4/1 10YR4/6, (10%), 2-5mm, d loam, blocky, fill 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  Phydric Soil Indicator(s): Reference(s): NeHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  Yes No Remarks: Hydric vegetation met?  | 0-6"   | A                    | 10Y  | R3/2        |           |                                    | The state of the s |
| 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  Note: possibly old fill  REFERENCE(S): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  Yes No REMARKS: Hydric vegetation met?  | 12-20" B 7.5YR3/1 10YR3/3, (3-5%), 1-5mm, d loam, blocky  Note: possibly old fill  Note: possibly old fill  HYDRIC SOIL INDICATOR(s): REFERENCE(s): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met? Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  | C 10"  | - D                  | F37  | 4/1         | -         | 03/D4/6 (100/) 2.5 1               |  |
| Note: possibly old fill  Note: possibly old fill  HYDRIC SOIL INDICATOR(s): REFERENCE(s): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  | Note: possibly old fill  Note: possibly old fill  HYDRIC SOIL INDICATOR(s): REFERENCE(s): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB REFERENCE(s): Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met? Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met? Disturbance (mowing) is probably preventing dominance by hydrophytic species.   |  |                      |  |             |           |                                    |  |
| HYDRIC SOIL INDICATOR(S):  HYDRIC SOIL INDICATOR(S):  REFERENCE(S):  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | HYDRIC SOIL INDICATOR(S):  REFERENCE(S): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | 12-20  | В                    | 7.51   | K3/1        | 1         | 01R3/3, (3-5%), 1-5mm, d           | loam, blocky   |
| HYDRIC SOIL INDICATOR(S):  HYDRIC SOIL INDICATOR(S):  REFERENCE(S):  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | HYDRIC SOIL INDICATOR(S):  REFERENCE(S): NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  |  |                      |  |             |           |                                    |  |
| IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  | Not         | e: poss   | sibly old fill                     |  |
| IIID  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  |             |           |                                    |  |
| OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  |             |           |                                    |  |
| IIID  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  |             |           |                                    |  |
| IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  |             |           |                                    | P. 401 4 A L L L L R L L L L L L L L L L L L L L   |
| IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | IIID  NEHSTC (1998)  OPTIONAL SOIL DATA Mapped NeB  REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  CONCLUSIONS  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   |  |                      |  |             |           |                                    |  |
| Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Wetland hydrology met?  Hydric soils criterion met?  | REFERENCE(S):  Taxonomic subgroup: Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  |  | INDICATOR(S):        |  |             |           |                                    |  |
| Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | Soil drainage class: Depth to active water table: NTCHS hydric soil criterion:  YES NO REMARKS: Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | OPTIONAL S   | OIL DATA Ma          | apped Nel  | 3           |           | REFERENCE(S):                      |  |
| CONCLUSIONS  YES NO REMARKS:  Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | CONCLUSIONS  YES NO REMARKS:  Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | Soil drainage cl<br>Depth to active  | ass:<br>water table: |  |             |           |                                    |  |
| YES NO REMARKS:  Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | YES NO REMARKS:  Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  |  |                      |  |             |           |                                    |  |
| Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | Hydric vegetation met?  Disturbance (mowing) is probably preventing dominance by hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?   | CONCLU   | JSIONS               |  |             |           |                                    |  |
| hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  | hydrophytic species.  Wetland hydrology met?  Hydric soils criterion met?  |  |                      |  | YES         | No        | REMARKS:                           |  |
| Hydric soils criterion met?  | Hydric soils criterion met?  | Hydric veget   | ation met?           |  |             |           |                                    | probably preventing dominance by   |
| Hydric soils criterion met?  | Hydric soils criterion met?  | Wetland hyd  | rology met?          |  | $\boxtimes$ |           |                                    |  |
|  |  |  |                      |  | $\boxtimes$ |           |                                    |  |
|  |  |  |                      | TLAND?   |             |           |                                    |  |

PLOT: TF4N-(P)-01

TRANSECT: N/A

TRANSECT: N/A

PLOT: TF4N-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 9, 2002

Upland

LOCATION: ALONG SOUTH SIDE OF DRAINAGE - 500 FT. IN FROM ROAD

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M  | NWI<br>STATUS                 |
|--|--------------------|----------------------|--------------|-------------------------------|
| Shrubs   |                    |                      |              | A PAPE                        |
| Viburnum dentatum var. lucidum   | 30/90              | 33                   | X            | FACW-                         |
| Vaccinium corymbosum   | 60/90              | 66                   | X            | FACW-                         |
|  |                    |                      |              |                               |
|  |                    |                      |              |                               |
|  |                    | · Watti              | 156          |                               |
|  | 111,=              |                      |              |                               |
|  |                    |                      |              |                               |
|  |                    | A TOTAL OF           | 100          |                               |
| Hydrophytes Subtotal (A): 2  PERCENT HYDROPHYTE  |                    | ytes Subtotal (B):   | 0            |                               |
| HYDROLOGY  □ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: □ NO RECORDED DATA □ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): _>19" Altered Hydrology (explain): |                    |                      |              |                               |
| ☐ Inundated ☐ Saturated in ☐ Water Marks upper 12" ☐ OTHER (explain):  | ☐ Drift Lines      | Sediment Deposits    | ☐ Dra<br>wit | inage Patterns<br>hin Wetland |
| □ Огнек (ехріаш):  |                    |                      |              |                               |

| Submission of p  | hoto of plot is enco                                       | ouraged. PLEASE R | REFER TO APPENDIX B, PHO   |   |
|--|--|-------------------|--|---|
| DEPTH  | HORIZON  | MATRIX COLOR      | REDOXIMORPHIC FEATURES (color, abundance, size, contrast)  | COMMENTS (USDA texture, nodules, concretions, masses pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0"   | 0  |                   |  |   |
| 0-8"   | A  | 10YR3/2           | The Property of the Property o | silty loam, granular  |
| 8-19"  | В  | 2.5Y4/4           | -  | silty loam, weak blocky   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
|  |  |                   |  |   |
| HYDRIC SOIL  | INDICATOR(S):  |                   | REFERENCE(S):  |   |
|  |  | apped NeB         |  |   |
| OPTIONAL S   | OIL DATA M   |                   | REFERENCE(S).  |   |
| OPTIONAL S  Taxonomic sub- Soil drainage cl Depth to active NTCHS hydric | group:<br>ass:<br>water table:                             |                   | REFERENCE(S):  |   |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active                     | group:<br>ass:<br>water table:<br>soil criterion:          |                   | REFERENCE(S):  |   |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active<br>NTCHS hydric     | group:<br>ass:<br>water table:<br>soil criterion:          | YES               | NO REMARKS:  |   |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active<br>NTCHS hydric     | group: ass: water table: soil criterion:                   |                   |  |   |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active<br>NTCHS hydric     | group: ass: water table: soil criterion: USIONS ation met? |                   | No Remarks:  |   |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active<br>NTCHS hydric     | group: ass: water table: soil criterion: USIONS ation met? |                   | No Remarks:  |   |

TRANSECT: N/A

PLOT: TF4N-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 9, 2002

Wetland

LOCATION: ALONG SOUTH SIDE OF DRAINAGE - 500 FT. IN FROM ROAD

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO                | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS  |
|--|-----------------------------------|----------------------|-------------|----------------|
| Shrubs   |                                   |                      |             |                |
| Vaccinium corymbosum   | 40/60                             | 66                   | X           | FACW-          |
| Viburnum dentatum var. lucidum   | 10/60                             | 17                   |             | FACW-          |
| Rosa multiflora  | 10/60                             | 17                   |             | FACU           |
| Trees  |                                   |                      |             |                |
| Salix discolor (DBHs: 5,5,8,4,5,4,3,3,6,5,5,5)   | 207/207                           | 100                  | X           | FACW           |
|  |                                   |                      |             |                |
| HYDROPHYTES  OBL   |                                   | FACU UP              |             |                |
| PERCENT HYDROI  HYDROLOGY  | YTES (100A/A+B): 100              | )                    |             |                |
| □ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: □ NO RECORDED DATA □ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): | 15", soil wet, not saturated at 1 | 15"                  |             |                |
| Altered Hydrology (explain):  Inundated Saturated in Wate  | Marks Drift Lines                 | ☐ Sediment [         | ∇l Dra      | inage Patterns |
| I Illulidated   Saturated III   Water  | larks Dilli Lines                 | Sediment             | △ Dia       | inage Paucin   |
| upper 12"  |                                   | Deposits             | with        | hin Wetland    |

| Submission of p   | hoto of plot is enco   | ouraged. PLEASE | REFE | R TO APPENDIX B, PHO                                    | TO #14   |
|---|--|-----------------|------|---|--|
| DEPTH   | Horizon  | MATRIX COLOR    |      | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0   | . 0  |                 |      |   |  |
| 0-2   | A  | 10YR2/1         |      |   | silty loam, granular   |
| 2-5   | A  | 10YR2/2         |      | 10YR3/4, 5%, 2-10,d                                     | silty loam, blocky   |
| 5-15  | В  | 2.5Y5/2         |      | 10YR4/4, 10%5-20, p                                     | silty loam, blocky   |
|   |  |                 |      |   |  |
|   |  |                 |      |   |  |
| Transa Con  | Transportation (a)   |                 |      | D   |  |
| IIID  | .INDICATOR(S):   |                 |      | REFERENCE(S):<br>NEHSTC (1998)                          |  |
| OPTIONAL So   |  | apped NeB       | 214  | Reference(s):   |  |
| Soil drainage cla<br>Depth to active on<br>NTCHS hydric s | ass:<br>water table:   |                 |      |   |  |
| CONCLU  | SIONS  |                 |      |   |  |
|   |  | YES             | No   | REMARKS:  |  |
| Hydric vegeta   | ation met?   |                 |      |   |  |
|   | rology met?  |                 |      |   |  |
| Wetland hydr  | A CONTRACTOR OF THE PROPERTY O |                 |      |   |  |
| Wetland hydr  | criterion met?   |                 |      |   |  |

 PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION
 TRANSECT: N/A
 PLOT: TF4n-(P)-04

 DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)
 DATE: OCT 18, 2002
 Wetland

LOCATION: NEAR EASTERN LIMIT AT SWALE (NORTH SIDE OF SWALE)

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE          | D<br>O<br>M | NWI<br>STATUS  |
|--|--------------------|-------------------------------|-------------|----------------|
| Shrubs   |                    |                               |             |                |
| Lonicera morrowii  | 10/86              | 12                            |             | FACU           |
| Viburnum dentatum var. lucidum   | 70/86              | 81                            | X           | FACW-          |
| Sambucus canadensis  | 1/86               | 1                             | 1577        | FACW           |
| Rosa multiflora  | 5/86               | 6                             |             | FACU           |
| <u>Herbs</u>   |                    |                               |             |                |
| Lonicerra morrowii   | 5/5                |                               |             | FACU           |
|  |                    |                               |             |                |
|  | Non-Hydrophy       |                               |             |                |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES (1   | Non-hydrophyte     | FACU UP:<br>es Subtotal (B):_ |             | V leng         |
| HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: |                    |                               |             |                |
| No Recorded Data   |                    |                               |             |                |
| ○ OBSERVATIONS   |                    |                               |             |                |
| Depth to Free Water:   |                    |                               |             |                |
| Depth to Saturation (including capillary fringe): >18"   |                    |                               |             |                |
| Depth to Saturation (including capillary fringe): >18"  Altered Hydrology (explain):  Inundated Saturated in Water Marks       | ☐ Drift Lines ☐    | Sediment                      | - 15        | inage Patterns |

| Submission of p                     | photo of plot is enco   | ouraged. PLEAS | E REFI | ER TO APPENDIX B, PHO                                     |  |
|-------------------------------------|---|----------------|--------|---|--|
| DEPTH                               | Horizon   | MATRIX COLOR   |        | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, roodistribution, soil water, etc.) |
| 0.5-0"                              |   |                |        |   |  |
| 0-9"                                | A   | 10YR3/2        |        | 10777 114 707 1 7 1                                       | silty loam, granular   |
| 9-18"                               | В   | 2.5Y4/2        |        | 10YR4/4, 5%, 1-5, d                                       | silty loam, blocky   |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        | 3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1                   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        |   |  |
|                                     |   |                |        | 3 11 1 3 1 1 1 1  |  |
|                                     |   |                |        |   |  |
| HYDRIC SOIL                         | LINDICATOR(S):  |                |        | REFERENCE(S):<br>NEHSTC (1998)                            |  |
| OPTIONAL S                          | OIL DATA  | Mapped NeB     |        | REFERENCE(S):   |  |
| Taxonomic sub                       | TO CONTROL OF THE PARTY OF THE |                |        |   |  |
| Soil drainage cl<br>Depth to active |   |                |        |   |  |
| NTCHS hydric                        |   |                |        |   |  |
|                                     |   |                |        |   | The Automotive Contract of   |
|                                     | <b>USIONS</b>   |                |        |   |  |
| CONCLU                              |   | YES            | No     | REMARKS:  |  |
| CONCLU                              | ration met?   |                |        |   |  |
| CONCLU  Hydric veget                | ation met:  |                |        |   |  |
|                                     |   | $\boxtimes$    |        |   |  |
| Hydric veget<br>Wetland hyd         |   |                |        |   |  |

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PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4N-(P)-05

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC) DATE: Nov 9, 2002 Upland

LOCATION: NEAR EASTERN LIMIT AT SWALE (NORTHSIDE OF SWALE)

| VEGETATION                          | - S- S- T          |                      |             |               |
|-------------------------------------|--------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES                 | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Trees                               |                    | F BY BY              |             | 4335-0        |
| Robinia pseudoacacia                | 745/745            | 100                  | X           | FACU-         |
| (DBHs: 10,12,6,12,10,5,10,10,10,10) |                    |                      |             |               |
| Vines                               | 3.35               |                      |             |               |
| Celastrus orbiculatus (2 stems)     | 2/2                |                      |             | FACU          |
| Shrubs                              |                    |                      |             |               |
| Viburnum dentatum var. lucidum      | 5/85               | 6                    |             | FACW-         |
| Rosa multiflora                     | 60/85              | 71                   | X           | FACU          |
| Lonicera morrowii                   | 20/85              | 24                   | X           | FACU          |
| Herbs                               |                    |                      |             |               |
| Solidago rugosa                     | 2/2                |                      |             | FAC           |
| HYDROPHYTES  OBL FACW FAC *OTHER    | NON-HYDROPH        | YTES  3  FACU UP     |             |               |
| OBL FACW FAC *OTHER                 | FAC-               | ACU UP               | L           |               |
| Hydrophytes Subtotal (A):0          | Non-hydrophyte     | es Subtotal (B):_    | 3           |               |
| PERCENT HYDROPHYT                   | TES (100A/A+B): 0  | 1                    | 14          | 45.55.11      |

| HYDROLOGY  |                      |                               |                    |                   |                                    |
|--|----------------------|-------------------------------|--------------------|-------------------|------------------------------------|
| □ RECORDED DATA                                      |                      |                               |                    |                   |                                    |
| Stream, lake, or tidal gage                          | Identificati         | on:                           |                    |                   |                                    |
| Aerial photography                                   | Identificati         | on:                           |                    |                   |                                    |
| Other  | Identificati         | on:                           |                    |                   |                                    |
|  |                      |                               |                    |                   |                                    |
| ○ OBSERVATIONS                                       |                      |                               |                    |                   |                                    |
| Depth to Free Water:                                 |                      |                               |                    |                   |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expl |                      | y fringe): <u>&gt;20", so</u> | il is moist at 20" |                   |                                    |
|  | turated in [oper 12" | Water Marks                   | ☐ Drift Lines      | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| OTHER (explain):                                     |                      |                               |                    | 1 10 10           |                                    |
|  |                      |                               |                    |                   |                                    |
|  |                      |                               |                    |                   |                                    |
|  |                      |                               |                    |                   |                                    |

| Submission of p  | hoto of plot is enco | uraged. PLEASE | REFE        | R TO APPENDIX B, PHO                                    | TO #16   |
|--|----------------------|----------------|-------------|---|--|
| DEPTH  | Horizon              | MATRIX COLOR   |             | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-9  | A                    | 10YR3/2        |             |   | silty loam, granular   |
| 9-11<br>11-20  | B<br>B               | 2.5Y4/3        |             | very faint  | silty loam, blocky   |
| 11-20  |                      | 2.5Y6/2        |             | 10YR4/4 40,5-10,d                                       | silty loam, blocky   |
|  |                      |                |             |   |  |
|  |                      |                | 4-7         |   |  |
|  |                      |                |             |   |  |
|  |                      |                |             |   |  |
|  |                      |                |             |   |  |
|  | OIL DATA Ma          |                |             | REFERENCE(S):   |  |
| Taxonomic subs<br>Soil drainage cla<br>Depth to active | ass:<br>water table: |                |             | REFERENCE(S):   |  |
| NTCHS hydric   | ISIONS               |                |             |   | A sometimes  |
| CONCLU   | DIGITO               | YES            | No          | REMARKS:  |  |
|  | DIOTID               | 1 ES           |             |   |  |
|  |                      |                | $\boxtimes$ |   |  |
| CONCLU   | ation met?           |                |             |   |  |
| CONCLU  Hydric veget  Wetland hydri                    | ation met?           |                |             |   |  |

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PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4N-(P)-06

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

LOCATION:

DATE: NOV 9, 2002

Wetland

| VEGETATION   | DOMINANCE       | PERCENT                   | D<br>O | NWI STATUS                      |
|--|-----------------|---------------------------|--------|---------------------------------|
| STRATUM AND SPECIES  | RATIO           | DOMINANCE                 | M      |                                 |
| Tree   |                 |                           |        |                                 |
| Nyssa sylvatica (DBH: 12)  | 113/113         | 100                       | X      | FAC                             |
| CELETAN LA   |                 | 14,557,104                |        |                                 |
| Shrubs   |                 |                           |        |                                 |
| Viburnum dentatum var. lucidum   | 50/61           | 82                        | X      | FACW-                           |
| Lonicera morrowii  | 10/61           | 16                        |        | FACU                            |
| Sambucus canadensis  | 1/61            | 2                         |        | FACW                            |
|  |                 |                           |        |                                 |
|  |                 |                           |        |                                 |
| HYDROPHYTES  The second of the | Non-hydrophyte  | FACU UP es Subtotal (B):_ |        |                                 |
| HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification:  | 77.             |                           |        |                                 |
| Aerial photography Identification: Other Identification:   |                 |                           |        |                                 |
| No Recorded Data   |                 |                           |        |                                 |
| ☐ NO RECORDED DATA ☐ OBSERVATIONS  |                 |                           |        |                                 |
| Depth to Free Water:   |                 |                           |        |                                 |
| Depth to Saturation (including capillary fringe): _>20" Altered Hydrology (explain):   |                 |                           |        |                                 |
| ☐ Inundated ☐ Saturated in ☐ Water Marks upper 12"   | ☐ Drift Lines ☐ | Sediment Deposits         |        | ainage Patterns<br>thin Wetland |
| ☐ OTHER (explain):   |                 |                           |        |                                 |
|  |                 |                           |        |                                 |

| Submission of p  | hoto of plot is enco | ouraged. PLEASE | REFER TO APPENDIX B, PI                                  | ЮТО #17  |
|--|----------------------|-----------------|--|--|
| DEPTH  | HORIZON              | MATRIX COLOR    | REDOXIMORPHIC FEATURE (color, abundance, size, contrast) | minosed pore minigo, reducer e mjeroj rod                    |
| 1-0"<br>0-9"   | 0                    | 10YR3/1         |  | aller lasma amanular maist                                   |
| 9-20"  | A<br>B               | Gley 1 4/N      | 10YR4/4, 20, 1-10, d                                     | silty loam, granular, moist<br>silty loam w/pebble to cobble |
| 7-20   |                      | Giey 1 4/14     | 1011C4/4, 20, 1-10, u                                    | size, granular phyllite                                      |
|  |                      |                 |  | weak blocky, very moist                                      |
| 70-71-1-11   |                      |                 |  |  |
| In Make 1  |                      |                 |  |  |
|  |                      |                 |  |  |
|  |                      |                 |  |  |
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|  |                      |                 |  |  |
| LIVERIC COL  | INDICATOR(S):        |                 | DEFENDACE(c).  |  |
| IIID   | INDICATOR(S).        |                 | REFERENCE(S):<br>NEHSTC (1998)                           |  |
|  |                      |                 | 1121010 (1770)   |  |
|  |                      |                 |  |  |
| OPTIONAL S   | OIL DATA M           | apped PmA       |  |  |
|  |                      |                 | REFERENCE(S):  |  |
| Taxonomic sub  |                      |                 |  |  |
| Cail drainage al   |                      |                 |  |  |
| The state of the s |                      |                 |  |  |
| Depth to active  |                      |                 |  |  |
| Depth to active  |                      |                 |  |  |
| Depth to active<br>NTCHS hydric  | JSIONS               | THE PARTY OF    |  |  |
| Depth to active<br>NTCHS hydric  | JSIONS               | VES             | NO REMARKS:  |  |
| Depth to active NTCHS hydric   |                      | YES             | NO REMARKS:  |  |
| Depth to active NTCHS hydric CONCLU  | ration met?          |                 |  |  |
| Depth to active NTCHS hydric CONCLU Hydric veget   | ration met?          |                 |  |  |
| Soil drainage of Depth to active NTCHS hydric  CONCLU  Hydric veget Wetland hyd Hydric soils   | ration met?          |                 |  |  |

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PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4N-(P)-07

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

DATE: Nov 9, 2002 Upland

LOCATION:

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
|--|--------------------|----------------------|-------------|---------------|
| Tree   | ******             |                      |             |               |
| Nyssa sylvatica (DBH: 12)  | 113/113            | 100                  | X           | FAC           |
| Shrubs   |                    | 7-2-1                |             |               |
| Viburnum dentatum var. lucidum   | 30/42              | 71                   | X           | FACW-         |
| Lonicera morrowii  | 10/42              | 24                   |             | FACU          |
| Sambucus canadensis  | 2/42               | 5                    |             | FACW          |
| <u>Herbs</u>   |                    |                      |             |               |
| Rubus hispidis   | 5/5                |                      |             | FACW          |
|  |                    |                      |             |               |
| OBL FACW FAC *OTHER  Hydrophytes Subtotal (A): 2  PERCENT HYDROPHYTES (19  | Non-hydrophyte     |                      |             |               |
| HYDROLOGY  RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: |                    |                      |             |               |
| <ul> <li>☑ No Recorded Data</li> <li>☑ Observations</li> </ul>   |                    |                      |             |               |
| Depth to Free Water:  Depth to Saturation (including capillary fringe): >20"  Altered Hydrology (explain):                     |                    |                      |             |               |

| Submission of p                                      | photo of plot is enco | ouraged. PLEASE    | REFER TO APPENDIX B, PHO                                  | OTO #18  |
|--|-----------------------|--------------------|---|--|
| DEPTH  | Horizon               | MATRIX COLOR       | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0"   |                       |                    |   |  |
| 0-5"   | A                     | 10YR3/2            | •   | silty loam, granular   |
| 5-16"<br>16-20"                                      | B                     | 10YR3/3<br>2.5Y4/2 | -   | silty loam, med. granular  |
| 10-20  | D .                   | 2.31712            |   | silty loam, med. granular  |
|  |                       |                    |   |  |
|  |                       | - 1 - 3 7 (6)      |   |  |
| OPTIONAL S   | L INDICATOR(S):       |                    | REFERENCE(S):   |  |
| Taxonomic sub<br>Soil drainage cl<br>Depth to active | ass:<br>water table:  |                    | REFERENCE(S):   |  |
| NTCHS hydric   |                       |                    |   |  |
| NTCHS hydric   | JSIONS                |                    |   |  |
|  | <u>JSIONS</u>         | YES                | NO REMARKS:   |  |
| NTCHS hydric   |                       | YES                | No Remarks:   |  |
| CONCLU  Hydric veget                                 | tation met?           | Yes                |   |  |
| CONCLU  Hydric veget Wetland hyd                     | ration met?           |                    |   |  |
| CONCLU  Hydric veget Wetland hyd                     | tation met?           |                    |   |  |

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PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4N-(P)-08

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC) DATE: Nov 11, 2002 Upland

LOCATION: 75 FT. FROM ROAD NEAR CULVERT AND CEDAR

| VEGETATION                    |                     | A STATE OF           |             |               |
|-------------------------------|---------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES           | DOMINANCE<br>RATIO  | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Shrubs                        |                     |                      | 119         |               |
| Viburnum dentatum var lucidum | 30/47               | 64                   | X           | FACW-         |
| Rosa multiflora               | 10/47               | 21                   | X           | FACU          |
| Sambucus canadensis           | 5/47                | 11                   |             | FACW          |
| Lonicera morrowii             | 2/47                | 4                    |             | FACU          |
| <u>Herbs</u>                  |                     |                      |             |               |
| Rubus hispidis                | 2/54                | 4                    |             | FACW          |
| Rumex crispus                 | 40/54               | 74                   | X           | FACU          |
| Juncus effusus                | 5/54                | 9                    | -           | FACW+         |
| Lonicera morrowii             | 2/54                | 4                    |             | FACU          |
| Festuca sp. (no fruit)        | 5/54                | 9                    |             | -/            |
|                               |                     |                      |             |               |
| HYDROPHYTES                   | NON-HYDROPHY FAC- F | Z UP                 | L           |               |
| Hydrophytes Subtotal (A):1    | Non-hydrophyte      | es Subtotal (B):_    | 2_          | _             |
| PERCENT HYDROPHYTE            | s (100A/A+B): 33    |                      |             |               |

| HYDROLOGY  |                         |                    |               |                   |                                    |
|--|-------------------------|--------------------|---------------|-------------------|------------------------------------|
| □ RECORDED DATA                                    |                         |                    |               |                   |                                    |
| Stream, lake, or tidal gage                        | Identific               | cation:            |               |                   |                                    |
| Aerial photography                                 | Identific               | eation:            |               |                   |                                    |
| Other  | Identific               | cation:            |               |                   |                                    |
|  |                         |                    |               |                   |                                    |
| ○ OBSERVATIONS                                     |                         |                    |               |                   |                                    |
| Depth to Free Water:                               |                         |                    |               |                   |                                    |
| Depth to Saturation (inc<br>Altered Hydrology (exp |                         | lary fringe): >20" |               |                   |                                    |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1              | aturated in<br>oper 12" | ☐ Water Marks      | ☐ Drift Lines | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| OTHER (explain): ox r                              | hiz                     |                    |               | -                 |                                    |
|  |                         |                    |               |                   |                                    |

| 37  |  | in or and pion mateure is | elative position of other plot(s) and the                 | ne wetland flag if not on plan.  |
|---|--|---------------------------|---|--|
| Vertical  | Distance betwe   | en plots: 1' East         | P-9   |  |
| Submission of ph  | noto of plot is encour   |                           | 127   |  |
| DEPTH   | Horizon  | MATRIX COLOR              | REDOXIMORPHIC FEATURES (color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-4"  | A  | 10YR3/2                   |   | silty loam, blocky   |
| 4-13"   | A  | 10YR2/2                   |   | silty, loam, blocky  |
| 13-17"  | B m  | nixed 10YR2/2 (60%)       |   | loam   |
|   |  | & 2.5Y4/1 (40%)           |   |  |
| 17-20"  | В  | 2.5Y5/4                   |   | sandy loam, granular   |
| Hydric Son  | INDICATOR(S):  |                           | REFERENCE(S):   |  |
| TIDAL BOIL  |  |                           |   |  |
| OPTIONAL SO   | roup:  |                           | REFERENCE(S):   |  |
| OPTIONAL SO Taxonomic subg Soil drainage cla  | roup:  |                           | REFERENCE(S):   |  |
| OPTIONAL SO   | roup:<br>iss:<br>water table:  |                           | REFERENCE(S):   |  |
| OPTIONAL SO<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active v<br>NTCHS hydric s | roup:<br>sss:<br>water table:<br>soil criterion:                     |                           | REFERENCE(S):   |  |
| OPTIONAL SO  Taxonomic subg Soil drainage cla Depth to active v                           | roup:<br>sss:<br>water table:<br>soil criterion:                     |                           |   |  |
| OPTIONAL SO<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active v<br>NTCHS hydric s | roup:<br>sss:<br>water table:<br>soil criterion:                     |                           | TO REMARKS:   |  |
| OPTIONAL SO<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active v<br>NTCHS hydric s | roup: sss: water table: soil criterion:                              |                           |   |  |
| OPTIONAL SO  Taxonomic subg Soil drainage cla Depth to active v NTCHS hydric s            | roup: uss: water table: soil criterion: SIONS ation met?             |                           | TO REMARKS:   |  |
| OPTIONAL SO  Taxonomic subg Soil drainage cla Depth to active v NTCHS hydric s            | roup: uss: water table: soil criterion: SIONS ation met? cology met? |                           | O REMARKS:  |  |

TRANSECT: N/A

PLOT: TF4N-(P)-08

TRANSECT: N/A

PLOT: TF4N-(P)-09

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov11, 2002

Wetland

LOCATION: 75 FT. FROM ROAD NEAR CULVERT AND CEDAR

| VEGETATION   | -17-20                         |            |     |           |
|--|--------------------------------|------------|-----|-----------|
|  | DOMINANCE                      | PERCENT    | D   | NWI       |
| STRATUM AND SPECIES  | RATIO                          | DOMINANCE  | M   | STATUS    |
| Shrubs   | ICHIO                          | DOMENTINEL | 141 | DIATOS    |
| Lonicera morrowii  | 15/27                          | 55         | X   | FACU      |
| Viburnum dentatum var. lucidum   | 10/27                          | 37         | X   | FACW-     |
| Rosa palustris   | 2/27                           | 7          |     | OBL       |
| Herbs  |                                |            |     |           |
| Solidago rugosa  | 10/52                          | 19         |     | FAC       |
| Juncus effusus   | 30/52                          | 57         | X   | FACW+     |
| Rumex crispus  | 10/52                          | 19         |     | FACU      |
| Rubus hispidis   | 2/52                           | 4          |     | FACW      |
|  |                                |            |     |           |
| ACTUAL AND AND ACTUAL  |                                |            |     |           |
| HYDROPHYTES  | Non-Hydrophyt                  | ES         |     | THE STATE |
| 2  |                                | 1          | _   |           |
| OBL FACW FAC *OTHER  | FAC- F                         | ACU UP     | L   |           |
| Hydrophytes Subtotal (A): 2  | Non-hydrophytes Subtotal (B):1 |            |     |           |
| PERCENT HYDROPHYTE   | s (100A/A+B): 66               |            |     | A DE      |
| THE PROPERTY OF THE PROPERTY O |                                |            |     |           |
| HYDROLOGY  |                                |            |     | No. 10 h  |

| HYDROLOGY  |                       |                        |                       |                       |                                    |
|--|-----------------------|------------------------|-----------------------|-----------------------|------------------------------------|
| ☐ RECORDED DATA  |                       |                        |                       |                       |                                    |
| Stream, lake, or tidal gage  | Identific             | ation:                 |                       |                       | A                                  |
| Aerial photography   | Identific             | ation:                 |                       |                       | and the state of                   |
| Other  | Identific             | ation:                 |                       |                       | 7                                  |
| ☑ No Recorded Data   |                       |                        |                       |                       | 2017                               |
| ○ OBSERVATIONS   |                       |                        |                       |                       |                                    |
| Depth to Free Water:   |                       |                        |                       |                       |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expla  |                       | lary fringe): >18"     |                       |                       | and the state of                   |
| The second secon | turated in<br>per 12" | ☐ Water Marks          | ☐ Drift Lines         | Sediment Deposits     | ☐ Drainage Patterns within Wetland |
| OTHER (explain): Ruts  | (6" deep) i           | indicating potentially | saturated conditions; | appears to be a seeps | age area.                          |
|  |                       |                        |                       | The second second     |                                    |
|  |                       |                        |                       |                       |                                    |
|  |                       |                        |                       |                       |                                    |

| SOIL-Sketc  | h landscape positio            | n of this plot. In | dicate rela | ative position of other plot(s) and | the wetland flag if not on plan.  |
|---|--------------------------------|--------------------|-------------|-------------------------------------|---|
| See plot  | TF4N- (P)-08                   |                    |             |                                     |   |
| Submission of pl  | noto of plot is encour         | aged.              |             |                                     |   |
|   |                                |                    |             | REDOXIMORPHIC FEATURES              | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, |
| DEPTH   | HORIZON                        | MATRIX COLO        |             | (color, abundance, size, contrast)  | root distribution, soil water, etc.)  |
| 0-6   | A                              | 10YR3/2            |             | -                                   | silty loam, granular  |
| 6-18  | В                              | 2.5Y4/1            |             | 10YR4/4, 10%, 5-10mm, d             | loam, granular,<br>some subangular cobbles  |
|   |                                |                    |             |                                     |   |
| HYDRIC SOIL<br>IIID   | INDICATOR(S):                  |                    |             | REFERENCE(S):<br>NEHSTC (1998)      |   |
| OPTIONAL So<br>Taxonomic subg<br>Soil drainage cla<br>Depth to active v<br>NTCHS hydric s | group:<br>ass:<br>water table: |                    |             | REFERENCE(S):                       |   |
| CONCLU  | SIONS                          |                    | -           |                                     |   |
|   |                                | YES                | No          | REMARKS:                            |   |
| Hydric vegeta   | ation met?                     |                    |             |                                     |   |
| Wetland hydr  |                                |                    |             |                                     |   |
|   |                                |                    |             |                                     |   |
|   | criterion met?                 |                    |             |                                     |   |
| IS THIS DATA  | POINT IN A WETL                | AND?               |             |                                     |   |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4n-(P)-09

TRANSECT: N/A

PLOT: TF4N-(P)-10

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 11, 2002

Wetland

LOCATION: MIDDLE OF TF4N

| VEGETATION                     |                                 |                      |        |               |
|--------------------------------|---------------------------------|----------------------|--------|---------------|
| STRATUM AND SPECIES            | DOMINANCE<br>RATIO              | PERCENT<br>DOMINANCE | O<br>M | NWI<br>STATUS |
| Shrubs                         |                                 |                      |        |               |
| Myrica pensylvanica            | 2/87                            | 2                    |        | FAC           |
| Vaccinium corymbosum           | 10/87                           | 11                   |        | FACW          |
| Viburnum dentatum var. lucidum | 75/87                           | 86                   | X      | FACW-         |
| <u>Herbs</u>                   |                                 |                      |        |               |
| Lonicera morrowii              | 1/1                             |                      |        | FACU          |
|                                |                                 |                      |        |               |
|                                |                                 |                      |        | 111-11        |
|                                |                                 |                      |        | At the sale   |
|                                |                                 |                      |        |               |
| HYDROPHYTES                    | Non-Hydrophy                    | VTEC                 |        |               |
| OBL FACW FAC *OTHER            |                                 | ACU UP               | L      |               |
| Hydrophytes Subtotal (A):1     | Non-hydrophytes Subtotal (B): 0 |                      |        |               |
| PERCENT HYDROPHYTES            | s (100A/A+B):10                 | 0                    |        |               |

| RECORDED DATA  |                        |                  |               |                        |                                    |
|--|------------------------|------------------|---------------|------------------------|------------------------------------|
| 1 TELEGIEDED DITTI                                   |                        |                  |               |                        |                                    |
| Stream, lake, or tidal gage                          | Identific              | ation:           |               |                        |                                    |
| Aerial photography                                   | Identific              | ation:           |               |                        |                                    |
| Other  | Identific              | ation:           |               |                        |                                    |
| No RECORDED DATA                                     |                        |                  |               |                        |                                    |
| OBSERVATIONS   |                        |                  |               |                        |                                    |
| Depth to Free Water: 1                               | <u>5"</u>              |                  |               |                        |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expl |                        | ary fringe): 11" |               |                        |                                    |
|  | turated in<br>oper 12" | ☐ Water Marks    | ☐ Drift Lines | ☐ Sediment<br>Deposits | □ Drainage Patterns within Wetland |
| ☐ OTHER (explain):                                   |                        |                  |               |                        |                                    |
|  |                        |                  |               |                        |                                    |

| SOIL-Sketc                          | in landscape position  | on of this plot. Indic | aic Icia | uve position of other plot(s) and                       | d the wetland flag if not on plan.  |
|-------------------------------------|------------------------|------------------------|----------|---|---|
| Submission of pl                    | hoto of plot is encour | raged. PLEASE          | REFE     | R TO APPENDIX B, PHO                                    | TO #19  |
| DEPTH                               | Horizon                | MATRIX COLOR           |          | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)  |
| 1-0"                                | 0                      |                        |          |   |   |
| 0-7"                                | A                      | 10YR3/2                |          | -   | silty loam, granular  |
| 7-18"                               | В                      | 2.5Y6/2                |          | 1YR4/4, 10%, 5-10, d                                    | loam, blocky  |
| 1011 5                              |                        |                        |          |   | THE REAL PROPERTY OF THE PARTY |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        | -        |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
|                                     |                        |                        |          |   |   |
| Hamara Com                          | Tymra i man (a)        |                        |          | Description (a)   |   |
| IIID                                | .INDICATOR(S):         |                        |          | REFERENCE(S):<br>NEHSTC (1998)                          |   |
| OPTIONAL S                          | OIL DATA Nel           | В                      |          | REFERENCE(S):   |   |
| Taxonomic subg<br>Soil drainage cla |                        |                        |          |   |   |
| Depth to active                     |                        |                        |          |   |   |
| NTCHS hydric                        |                        |                        |          |   |   |
|                                     |                        |                        |          | Market Committee  |   |
| CONCLU                              | SIONS                  |                        |          |   |   |
|                                     |                        | YES                    | No       | REMARKS:  |   |
| Hydric vegeta                       | ation met?             |                        |          |   |   |
| Wetland hydrology met?              |                        |                        | П        |   |   |
| Hydric soils criterion met?         |                        |                        | П        |   |   |
|                                     |                        |                        | _        |   |   |
| IS THIS DATA                        | APOINT IN A WET        | LAND?                  |          |   |   |
|                                     |                        |                        |          |   |   |
| PROJECT TIT                         | LE: NAVSTAN            | EWPORT WETLAN          | D DELI   | NEATION TRANSECT: N                                     | V/A <u>PLOT</u> : TF4N-(P)-10   |

TRANSECT: N/A

PLOT: TF4N-(P)-11

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 11, 2002

Upland

LOCATION: MIDDLE OF TF4N

| VEGETATION  STRATUM AND SPECIES   | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS               |
|---|--------------------|----------------------|-------------|-----------------------------|
| Shrubs  | - 100              |                      |             |                             |
| Myrica pensylvanica   | 5/85               | 6                    |             | FAC                         |
| Viburnum dentatum   | 80/85              | 94                   | X           | FACW-                       |
| Trees   |                    |                      |             |                             |
| Prunus serotina (DBH: 14")  | 154/154            | 100                  | X           | FACU                        |
|   |                    |                      |             |                             |
| HYDROPHYTES  OBL 1 FACW FAC *OTHER  Hydrophytes Subtotal (A): 1  PERCENT HYDROPHYTES  | Non-Hydrophyt      | FACU UP:             |             |                             |
| HYDROLOGY  □ RECORDED DATA  Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: □ NO RECORDED DATA □ OBSERVATIONS Depth to Free Water: Depth to Saturation (including capillary fringe): >20" Altered Hydrology (explain): |                    |                      |             |                             |
| ☐ Inundated ☐ Saturated in ☐ Water Marks upper 12" ☐ OTHER (explain):   | ☐ Drift Lines [    | Sediment Deposits    |             | nage Patterns<br>in Wetland |

| SOIL-Sketc                          | h landscape posit  | ion of this p | olot. Indic | cate relat  | tive position of other plot(s) and   | the wetland flag if not on plan.   |
|-------------------------------------|--|---------------|-------------|-------------|--|--|
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
| Submission of p                     | hoto of plot is encor  | uraged.       | PLEASE      | REFE        | ER TO APPENDIX B, PHO  |  |
| DEPTH                               | Horizon  | MATRIX        | COLOR       |             | EDOXIMORPHIC FEATURES color, abundance, size, contrast)  | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root   |
| 2-0"                                | 0  | MATRIX        | COLOR       | (0          | color, abundance, size, contrast)  | distribution, soil water, etc.)  |
| 0-5"                                | A  | 10Y           | R3/3        |             | :=(  | silty loam, granular   |
| 5-18"                               | В  | 10Y           | R5/4        |             |  | loam, blocky   |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     | +  |               |             | -           |  |  |
|                                     |  |               |             |             |  |  |
|                                     | 141  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
| HYDRIC SOIL                         | INDICATOR(S):  | 5, 18-        |             |             | REFERENCE(S):  |  |
| 1110100000                          | in the state of th |               |             |             | Test Exter(CE(C)).   |  |
|                                     |  |               |             |             |  |  |
|                                     |  |               |             |             |  |  |
| OPTIONAL S                          | OIL DATA   |               |             |             |  | The state of the s |
| 2.14                                |  |               |             |             | REFERENCE(S):  |  |
| Taxonomic subg<br>Soil drainage cla |  |               |             |             |  |  |
| Depth to active                     |  |               |             |             |  |  |
| NTCHS hydric s                      |  |               |             |             |  |  |
|                                     |  |               |             | - 7         |  |  |
| CONCLU                              | ISIONS   |               |             | -           |  |  |
| 0011020                             | 220112   |               | YES         | No          | REMARKS:   |  |
| TToodala socaate                    |  |               |             |             | TEMPHOLES.   |  |
| Hydric vegeta                       |  |               |             |             |  |  |
| Wetland hydr                        |  |               |             |             |  |  |
| Hydric soils                        | criterion met?   |               |             |             |  |  |
| IS THIS DATA                        | POINT IN A WET   | TLAND?        |             | $\boxtimes$ |  |  |
| In Later Street                     |  | HT LE         | Mrs 1       |             | THE RESERVE OF THE PARTY OF THE |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: TF4N-(P)-11

TRANSECT: TANK FARM 3 PLOT: LB-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE: OCT 17, 2002** 

Wetland

LOCATION: NW SIDE

| VEGETATION                                       |                    | 11/3/17              |             |               |
|--|--------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES                              | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Shrubs   |                    |                      |             |               |
| Viburnum dentatum var. lucidum                   | 30/75              | 40                   | X           | FACW-         |
| Alnus incana                                     | 40/75              | 53                   | X           | FACW          |
| Rosa multiflora                                  | 5/75               | 7                    |             | FACU          |
| Vines  |                    | # 3                  |             |               |
| Celastrus orbiculatus                            | 30/30              | 100                  | X           | FACU          |
| <u>Herbs</u>                                     |                    |                      |             |               |
| Lonicera morrowii                                | 2/2                |                      |             | FACU          |
| Trees  |                    |                      |             |               |
| Betula alleghaniensis (DBH: 11")                 | 95/95              | 100                  | X           | FAC           |
|  |                    |                      |             |               |
| HYDROPHYTES                                      | Non-Hydrophy       | YTES                 |             |               |
| OBL 2 1 FACW *OTHER  Hydrophytes Subtotal (A): 3 | FAC- F             | ACU UP               |             |               |
| PERCENT HYDROPHYTES                              |                    | os Subtotai (B)      |             | Topic S       |

| HYDROLOGY  | 12.772               |             | 6-3                 |                        |                                    |
|--|----------------------|-------------|---------------------|------------------------|------------------------------------|
| ☐ RECORDED DATA                                    |                      |             |                     |                        |                                    |
| Stream, lake, or tidal gage                        | Identificatio        | n:          |                     |                        |                                    |
| Aerial photography                                 | Identificatio        | n:          |                     |                        |                                    |
| Other  | Identificatio        | n:          |                     |                        |                                    |
| ☑ No Recorded Data                                 |                      |             |                     |                        |                                    |
| ○ OBSERVATIONS                                     |                      |             |                     |                        |                                    |
| Depth to Free Water: 1                             | <u>7"</u>            |             |                     |                        |                                    |
| Depth to Saturation (inc<br>Altered Hydrology (exp |                      |             | rom Lawton Valley I | Reservoir              |                                    |
|  | aturated in pper 12" | Water Marks | ☐ Drift Lines       | ☐ Sediment<br>Deposits | ☐ Drainage Patterns within Wetland |
| ☐ OTHER (explain):                                 |                      |             |                     |                        |                                    |
|  |                      |             |                     |                        |                                    |
|  |                      |             |                     |                        |                                    |

| Submission of p             | hoto of plot is end             | couraged. PLE | ASE R   | EFER | TO APPENDIX B, PHOTO                                    | 0 #21   |  |  |  |
|-----------------------------|---------------------------------|---------------|---|------|---|---|--|--|--|
| DEPTH                       | HORIZON                         | MATRIX (      | COLOR   |      | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers root distribution, soil water, etc.) |  |  |  |
| 0-12"                       | A                               | Gley 1 3      |   |      | 10YR4/6, (5%) 10, d                                     | loam  |  |  |  |
| 12-18"                      | В                               | Gley 1 4      |   |      | 7.5YR4/5, (30%), 10, f                                  | silty loam  |  |  |  |
| 14-15"                      |                                 | Contains laye | ins layer of bright soils, same color as redox for 12-18" zone. |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
| ALVAN I                     |                                 |               | M   |      |   |   |  |  |  |
|                             |                                 |               |   |      | 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7                 |   |  |  |  |
| 1 1 1 1 1 1                 |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   | -    |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   | 1    |   | 7 7 7 7 70  |  |  |  |
| HYDRIC SOIL                 | INDICATOR(S                     | ):            |   |      | REFERENCE(S):   |   |  |  |  |
| IIID                        |                                 |               |   |      | NEHSTC (1998)   |   |  |  |  |
|                             |                                 |               |   |      |   |   |  |  |  |
| 0                           | D 1                             | f 137.D       |   | -    |   | Charles and a beauty  |  |  |  |
| OPTIONAL S                  | OIL DATA N                      | Sapped NeB    |   |      | December (c).   |   |  |  |  |
| Taxonomic subj              | zroup:                          |               |   |      | REFERENCE(S):   |   |  |  |  |
| Soil drainage cl            |                                 |               |   |      |   |   |  |  |  |
| Depth to active             |                                 |               |   |      |   |   |  |  |  |
| NTCHS hydric                | soil criterion:                 |               |   |      |   |   |  |  |  |
|                             |                                 |               |   |      | S III S S S S S S S S S S S S S S S S S                 |   |  |  |  |
| CONCLU                      | SIONS                           |               | 40  |      |   |   |  |  |  |
|                             |                                 |               | YES   | No   | REMARKS:  |   |  |  |  |
| Hydric vegetation met?      |                                 | $\boxtimes$   |   |      |   |   |  |  |  |
| Wetland hydrology met?      |                                 |               | $\boxtimes$   |      |   |   |  |  |  |
| Hydric soils criterion met? |                                 | $\boxtimes$   |   |      |   |   |  |  |  |
| HVaric soils                | IS THIS DATAPOINT IN A WETLAND? |               |   |      | Boundary sharply defined b                              |   |  |  |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: TANK FARM 3 PLOT: LB-(P)-01

TRANSECT: TANK FARM 3

<u>PLOT</u>: LB-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE**: OCT 18, 2002

Upland

LOCATION: NW SIDE

| VEGETATION                       |                 |                   | D |        |
|----------------------------------|-----------------|-------------------|---|--------|
|                                  | DOMINANCE       | PERCENT           | 0 | NWI    |
| STRATUM AND SPECIES              | RATIO           | DOMINANCE         | M | STATUS |
| Shrubs                           |                 |                   |   |        |
| Alnus incana                     | 25/50           | 50                | X | FACW   |
| Viburnum dentatum var. lucidum   | 20/50           | 40                | X | FACW-  |
| Rosa multiflora                  | 5/50            | 10                | 1 | FACU   |
| Herbs                            |                 |                   |   |        |
| Lonicera morrowii                | 2/2             |                   |   | FACU   |
| Trees                            |                 |                   |   |        |
| Alnus incana (DBHs: 30 @ 6")     | 848/943         | 90                | X | FACW   |
| Betula alleghaniensis (DBH: 11") | 95/943          | 10                |   | FAC    |
|                                  |                 |                   |   |        |
|                                  | 200             |                   |   |        |
| HYDROPHYTES                      | Non-Hydroph     | YTES              |   |        |
| OBL FACW FAC *OTHER              | FAC-            | FACU UP           | L |        |
| Hydrophytes Subtotal (A):3       |                 | es Subtotal (B):_ |   |        |
|                                  |                 | a Subibiai (B)    |   | III.   |
| PERCENT HYDROPHYTES              | (100A/A+B): 100 |                   |   |        |

| HYDROLOGY   |                    | G 48.8       |               |                   |                                    |
|---|--------------------|--------------|---------------|-------------------|------------------------------------|
| ☐ RECORDED DATA   |                    |              |               |                   | e una productiva la                |
| Stream, lake, or tidal gage                               | Identification     |              |               |                   |                                    |
| Aerial photography  | Identification     | 1:           |               |                   |                                    |
| Other   | Identification     | 1;           |               |                   |                                    |
| ☑ No Recorded Data  |                    |              |               |                   |                                    |
| ○ OBSERVATIONS  |                    |              |               |                   |                                    |
| Depth to Free Water:                                      |                    |              |               |                   |                                    |
| Depth to Saturation (included) Altered Hydrology (explain |                    | ringe): >20" |               |                   |                                    |
|   | turated in per 12" | Water Marks  | ☐ Drift Lines | Sediment Deposits | ☐ Drainage Patterns within Wetland |
| ☐ OTHER (explain):  |                    |              |               |                   |                                    |
|   |                    |              |               |                   | AL TOTAL                           |
|   |                    |              |               |                   |                                    |

| bmission of p                       | hoto of plot is enco                   | ouraged. PLF | ASE R                  | EFER | TO APPENDIX B, PHOTO                                    | D #21  |
|-------------------------------------|--|--------------|------------------------|------|---|--|
| DEPTH                               | Horizon                                | MATRIX       |                        | R    | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers root distribution, soil water, etc.)  |
| 0-6"                                | A                                      | 10YF         |                        |      | - BART  | loam, blocky   |
| 6-12"                               | В                                      | 2.5Y         | NAME OF TAXABLE PARTY. |      |   | sandy loam   |
| 12-14"                              | В                                      | 2.5YI        |                        | 1    | 0YR3/4, (10%), 2-5mm, d                                 | sandy loam, platey   |
| 14-16"                              | В                                      | 2.5YI        | 23/1                   |      |   | loam, platey   |
|                                     |  |              |                        |      |   |  |
|                                     |  |              |                        |      |   |  |
|                                     |  |              |                        |      |   |  |
|                                     |  |              |                        |      |   |  |
|                                     |  |              |                        |      |   |  |
|                                     | . INDICATOR(S):                        | - lar        | Ì                      |      | REFERENCE(S):   |  |
| PTIONAL S                           | OIL DATA M                             | apped NeB    |                        |      | REFERENCE(S):   |  |
| exonomic sub<br>oil drainage cl     | ass:                                   |              |                        |      |   |  |
| epth to active                      | water table:<br>soil criterion:        |              |                        |      |   | A DESCRIPTION OF THE PERSON OF |
|                                     | USIONS                                 |              |                        |      |   |  |
| ONCLU                               |  |              | YES                    | No   | REMARKS:  |  |
|                                     |  |              |                        |      |   |  |
| ONCLU                               | ation met?                             |              | $\boxtimes$            |      |   |  |
| ONCLU                               |  |              |                        |      |   |  |
| CONCLU<br>ydric veget<br>etland hyd | ration met? rology met? criterion met? |              |                        |      |   |  |

Depth to Saturation (including capillary fringe): >20"

☐ Saturated in

upper 12"

■ Water Marks

☐ Drift Lines

☐ Sediment

Deposits

☐ Drainage Patterns within Wetland

Altered Hydrology (explain):

☐ Inundated

☐ OTHER (explain):

TRANSECT: TANK FARM 3

PLOT: LB-(P)-03

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE**: OCT 19, 2002

Upland

LOCATION: ALONG S-SIDE OF LAWTON BROOK AT BEND IN WETLANDS

| VEGETATION  STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
|--|--------------------|----------------------|-------------|---------------|
| Trees  |                    |                      |             |               |
| Betula alleghaniensis (DBH: 18")   | 254                | 36                   |             | FAC           |
| Fagus grandifolia (DBH: 24")   | 452                | 64                   | X           | FACU          |
| Shrubs   |                    |                      |             |               |
| Lindera benzoin  | 30/62              | 48                   | X           | FACW-         |
| Viburnum dentatum var. lucidum   | 15/62              | 24                   | X           | FACW-         |
| Rosa multiflora  | 15/62              | 24                   | X           | FACU          |
| Fagus grandifolia  | 2/62               | 3                    |             | FACU          |
| <u>Herbs</u>   |                    |                      |             |               |
| Dryopteris intermedia  | 5/5                |                      |             | FACU          |
|  |                    |                      |             | 17 MI         |
| HYDROPHYTES  | Non-Hydrophy       | YTES                 |             |               |
| OBL FACW FAC *OTHER  | FAC- F             | FACU UP              | L           |               |
| Hydrophytes Subtotal (A):2   | Non-hydrophyte     | es Subtotal (B):_    | 2           | 400           |
| PERCENT HYDROPHYTE   | s (100A/A+B): 50   |                      |             | 4-12          |
| HYDDOL OCY   |                    |                      |             |               |
| HYDROLOGY  ☐ RECORDED DATA   |                    |                      |             |               |
| Stream, lake, or tidal gage Identification: Aerial photography Identification: |                    |                      |             |               |
| Other Identification:  |                    |                      |             |               |
| ☑ No Recorded Data   |                    |                      |             |               |
| ○ OBSERVATIONS   |                    |                      |             |               |
| Depth to Free Water:   |                    |                      |             |               |

|  | hoto of plot is enco   | ouraged. Pl | LEASE F | REFE        | R TO APPENDIX B, PHO                                    |  |
|--|--|-------------|---------|-------------|---|--|
| Dертн  | Horizon  | Matrix (    | Color   |             | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-3"   | A  |             |         |             |   | loam, high organic & roots   |
| 3-17"  | С  | 10YR        | 3/2     |             | •   | silty loam w/fragments of phylllit   |
| 17"+   | С  |             |         |             |   | predominantly phyllite   |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   | English Tark   |
|  |  |             |         |             |   | all-state on the   |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
|  |  |             |         |             |   |  |
| HYDRIC SOII  | LINDICATOR(S)  |             | 7. SA   |             | REFERENCE(S):   |  |
| HYDRIC SOIL  OPTIONAL S  Taxonomic sub   | SOIL DATA M  | apped NeB   |         |             | REFERENCE(S):   |  |
| OPTIONAL S Taxonomic sub; Soil drainage cl   | SOIL DATA M group: lass:                                     | 11.03       |         |             |   |  |
| OPTIONAL S Taxonomic sub   | GOIL DATA M group: ass: water table:                         | 11.03       |         |             |   |  |
| OPTIONAL S Taxonomic sub Soil drainage cl Depth to active NTCHS hydric   | group: ass: water table: soil criterion:                     | 11.03       |         |             |   |  |
| OPTIONAL S Taxonomic sub Soil drainage cl Depth to active  | group: ass: water table: soil criterion:                     | 11.03       |         |             | Reference(s):   |  |
| OPTIONAL S Taxonomic subjection of the second of the secon | group: ass: water table: soil criterion:                     | 11.03       | YES     | No M        |   |  |
| OPTIONAL S Taxonomic sub; Soil drainage cl Depth to active NTCHS hydric  CONCLU  Hydric veget  | group: ass: water table: soil criterion:  JSIONS tation met? | 11.03       | YES     | $\boxtimes$ | Reference(s):   |  |
| OPTIONAL S Taxonomic sub Soil drainage cl Depth to active NTCHS hydric  CONCLU  Hydric veget Wetland hyd   | group: ass: water table: soil criterion:  JSIONS tation met? | 11.03       | YES     |             | Reference(s):   |  |

TRANSECT: TANK FARM 3 PLOT: LB-(P)-04

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE: OCT 19, 2002** 

Wetland

LOCATION: ADJACENT TO TF3-03 AND WITHIN WETLANDS

| VEGETATION                       |                    | and the second       |             | 2 / 1997      |
|----------------------------------|--------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES              | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Shrubs                           |                    |                      | The same    |               |
| Lindera benzoin                  | 30/41              | 73                   | X           | FACW-         |
| Viburnum dentatum var. lucidum   | 1/41               | 3                    |             | FACW-         |
| Rosa multiflora                  | 5/41               | 12                   |             | FACU          |
| Betula alleghaniensis            | 5/41               | 12                   |             |               |
| <u>Herbs</u>                     |                    |                      |             |               |
| Onoclea sensibilis               | 1/1                |                      | 1           | FACW          |
| Trees                            |                    |                      |             |               |
| Salix discolor (DBHs: 12,6,4,8)  | 204/204            |                      | X           | FACW          |
|                                  |                    |                      |             |               |
| Hypnonymera                      | Nov. Hymnonym      |                      |             |               |
| HYDROPHYTES  OBL FACW FAC *OTHER | NON-HYDROPHY FAC-  | ACU UP               | _           |               |
| OBL FACW FAC OTHER               | rac- r             | ACU UP               | L           |               |
| Hydrophytes Subtotal (A): 2      | Non-hydrophyte     | es Subtotal (B):_    | 0_          |               |
| PERCENT HYDROPHYTES              | (100A/A+B):100     |                      |             |               |

| HYDROLOGY   |                    | Marie -          | P             |                   |                                    |
|---|--------------------|------------------|---------------|-------------------|------------------------------------|
| ☐ RECORDED DATA                                       |                    |                  |               |                   |                                    |
| Stream, lake, or tidal gage                           | Identification:    |                  |               |                   | -                                  |
| Aerial photography                                    | Identification:    |                  |               |                   | The state of the                   |
| Other   | Identification:    |                  |               |                   | 2 2 14 74                          |
| ☑ No Recorded Data                                    |                    |                  |               |                   |                                    |
| ○ OBSERVATIONS  |                    |                  |               |                   | 1.0                                |
| Depth to Free Water:                                  |                    |                  |               |                   |                                    |
| Depth to Saturation (incl<br>Altered Hydrology (expla |                    | inge): <u>0"</u> |               |                   | 5.50                               |
|   | turated in per 12" | Water Marks      | ☐ Drift Lines | Sediment Deposits | ☑ Drainage Patterns within Wetland |
| OTHER (explain): water                                | r-stained leaves   |                  |               |                   |                                    |
|   |                    |                  |               |                   | A CONTRACTOR OF                    |
|   |                    |                  |               |                   |                                    |

| SOIL-Sketc   | ch landscape posi    | tion of this p | olot. Indic | ate rela | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|--|----------------------|----------------|-------------|----------|---|--|
|  |                      |                |             |          |   |  |
| Submission of pl   | hoto of plot is enco | ouraged.       | PLEASE      | REFE     | ER TO APPENDIX B, PHO                                   | TO #23   |
| DEPTH  | Horizon              | MATRIX         | COLOR       |          | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)   |
| 0-8  | A                    | 10Y            | R3/2        |          |   | loamy sand   |
| 8-12   | В                    | 5Y             | 4/1         | 1        | 10YR3/4, (5%), 2-5mm, d                                 | silty loam, clay lenses  |
|  |                      |                |             |          |   | present but not continuous   |
| 12+  | В                    | Gley 1         | 2.5/10Y     |          | ¥   | clay loam  |
|  |                      |                |             |          |   |  |
|  |                      |                |             |          |   |  |
|  |                      |                |             |          |   |  |
|  |                      |                |             |          |   |  |
|  |                      | T-N s          |             |          |   |  |
| HYDRIC SOIL  | . INDICATOR(S)       |                |             |          | REFERENCE(S):<br>NEHSTC (1998)                          |  |
| OPTIONAL S   | OIL DATA M           | apped NeI      | 3           |          | 2   |  |
| Taxonomic subs<br>Soil drainage cla<br>Depth to active<br>NTCHS hydric | ass:<br>water table: |                |             |          | REFERENCE(S):   |  |
| CONCLU   | JSIONS               |                |             |          |   |  |
|  |                      |                | YES         | No       | REMARKS:  |  |
| Hydric veget   | ration met?          |                | $\boxtimes$ |          |   |  |
|  |                      |                |             |          |   |  |
| Wetland hyd  | criterion met?       |                | ⊠           |          |   |  |
|  | APOINT IN A WE       | TLAND?         |             |          |   |  |
|  |                      |                |             |          |   | STATE OF STA |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: TANK FARM 3 PLOT: LB-(P)-04

TRANSECT: N/A

PLOT: CP-(P)-01

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 14, 2002

Upland

LOCATION: IN MOWED POWERLINE

| VEGETATION   |                    |                      |             |               |
|--|--------------------|----------------------|-------------|---------------|
| STRATUM AND SPECIES  | DOMINANCE<br>RATIO | PERCENT<br>DOMINANCE | D<br>O<br>M | NWI<br>STATUS |
| Shrubs   |                    |                      | 400         |               |
| Rhus typhina   | 10/10              | 100                  | X           | -             |
| Vines  |                    |                      |             |               |
| Celastrus orbiculatus (5 stems)  | 5/5                | 100                  | X           | FACU          |
| <u>Herbs</u>   |                    |                      |             |               |
| Euthamia tenuifolia  |                    | 3 5 5 5 6 1          |             | FACU          |
| Solidago rugosa  | 5/70               | 7                    | - 16        | FAC           |
| Juncus effusus   | 25/70              | 36                   | X           | FACW+         |
| Panicum sp. (no fruit)   | 30/70              | 43                   | X           |               |
| Rubus hispidis   | 10/70              | 14                   |             | FACW          |
|  | 72.42              | 1.53                 | -4          |               |
| HYDROPHYTES 1  | Non-Hydrophy       | /TES                 |             |               |
| OBL FACW FAC *OTHER  | FAC- F             | FACU UP              | L           |               |
| Hydrophytes Subtotal (A):1   | Non-hydrophyte     | es Subtotal (B):_    | 1_          |               |
| PERCENT HYDROPHYTES  | s (100A/A+B): 50   |                      |             |               |
| THE POLICE OF TH |                    |                      |             | 7 18 -1111    |

|  | PERCENT HYDROPHYTES (             | 100A/A+B):   | 50                     |   |
|--|-----------------------------------|--|------------------------|---|
| A BUILDING SHEET                                       | SHELLING WEST                     |  |                        |   |
| HYDROLOGY  |                                   |  |                        |   |
| □ RECORDED DATA  |                                   |  |                        |   |
| Stream, lake, or tidal gage                            | Identification:                   |  |                        |   |
| Aerial photography                                     | Identification:                   |  |                        |   |
| Other  | Identification:                   |  |                        |   |
|  |                                   |  |                        |   |
| ○ OBSERVATIONS   |                                   |  |                        |   |
| Depth to Free Water: 11                                | "                                 |  |                        |   |
| Depth to Saturation (inclu<br>Altered Hydrology (expla | nding capillary fringe): 11", hea | avy rain previous day  |                        |   |
|  | urated in Water Marks             | ☐ Drift Lines  | ☐ Sediment<br>Deposits | Drainage Patterns within Wetland        |
| ☐ OTHER (explain):                                     |                                   |  | •                      | She |
|  |                                   |  |                        |   |
|  |                                   | A STATE OF THE STA |                        |   |

| ubmission of p                  | hoto of plot is enco | ouraged. P | LEASE | REFE        | R TO APPENDIX B, PHO                                    |  |
|---------------------------------|----------------------|------------|-------|-------------|---|--|
| DEPTH                           | HORIZON              | MATRIX     | COLOR | 175.7       | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 0-9"                            | A                    | 10YR       |       | - (-        | -   | silty loam, blocky   |
| 9-20"                           | В                    | 2.54Y      | 4/3   |             | -   | silty loam, granular   |
|                                 |                      |            |       |             |   | to weak blocky   |
|                                 |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
| - Value                         |                      |            |       |             |   |  |
| 14 875                          |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
|                                 |                      |            |       |             |   |  |
|                                 | INDICATOR(S):        | A District |       |             | REFERENCE(S):   | and the same of the same   |
| OPTIONAL S                      | SOIL DATA M          | Sapped Mm/ | 1     |             | REFERENCE(S):   |  |
| axonomic sub                    | group:               |            |       |             | REFERENCE(3).   |  |
| oil drainage cl                 |                      |            |       |             |   |  |
| Depth to active<br>NTCHS hydric |                      |            |       |             |   |  |
| erens nyune                     | son criterion.       |            |       |             |   |  |
| CONCLU                          | USIONS               |            |       |             | 10000   |  |
|                                 |                      |            | YES   | No          | REMARKS:  |  |
| Hydric veget                    | tation met?          |            |       | $\boxtimes$ |   |  |
| Vetland hyd                     | rology met?          |            |       | $\boxtimes$ | Shallow saturated soils due                             | to heavy rain  |
| v chand nyd                     |                      |            |       | $\boxtimes$ |   |  |
| Hydric soils                    | criterion met?       |            |       |             |   |  |

TRANSECT: N/A

PLOT: CP-(P)-02

DELINEATOR(S): G. METZLER (TEC), M. NARCHI (TEC)

**DATE:** Nov 14, 2002

Wetland

LOCATION: IN MOWED POWERLINE

| <u>VEGETATION</u>  | DOMINANCE           | PERCENT           | D<br>O | NWI    |
|--|---------------------|-------------------|--------|--------|
| STRATUM AND SPECIES  | RATIO               | DOMINANCE         | M      | STATUS |
| Herbs ~  | 20/05               |                   |        |        |
| Juncus effusus   | 30/85               | 35                | X      | FACW+  |
| Panicum sp. (no fruit)   | 30/85               | 35                | X      |        |
| Rubus hispidis   | 20/85               | 23                | X      | FACW   |
| Dactylis glomerata   | 5/85                | 6                 |        | FACU   |
| Note: Plot in mowed powerline. Vaccinium corymbosum 10%, Myrica pensylvanica 15% at edge of powerline. |                     |                   |        |        |
| HYDROPHYTES  | NON-HYDROPHY FAC- F | ACU UP            | L      |        |
| Hydrophytes Subtotal (A): 2  PERCENT HYDROPHYTES (10   | Non-hydrophyte      | es Subtotal (B):_ | 0      | _G (8) |

| HYDROLOGY  |                    |                   |                       |                   |                                       |
|--|--------------------|-------------------|-----------------------|-------------------|---------------------------------------|
| ☐ RECORDED DATA  |                    |                   |                       |                   |                                       |
| Stream, lake, or tidal gage                            | Identification     | n:                |                       |                   |                                       |
| Aerial photography                                     | Identification     | n:                |                       |                   |                                       |
| Other  | Identification     | n:                |                       |                   |                                       |
|  |                    |                   |                       |                   |                                       |
| ○ OBSERVATIONS   |                    |                   |                       |                   |                                       |
| Depth to Free Water: 11                                | <u>l"</u>          |                   |                       |                   |                                       |
| Depth to Saturation (inclu<br>Altered Hydrology (expla |                    | fringe): 9", hear | vy rain previous day  |                   |                                       |
|  | curated in per 12" | Water Marks       | ☐ Drift Lines         | Sediment Deposits | ☐ Drainage Patterns<br>within Wetland |
| OTHER (explain): ox rh                                 | niz in 0-5". sha   | llow depressions, | tire ruts, appears to |                   |                                       |
|  |                    |                   |                       |                   |                                       |

| SOIL-Sketc       | h landscape po                   | sition of this p | plot. Indic | cate rela | tive position of other plot(s) and                      | the wetland flag if not on plan.   |
|------------------|----------------------------------|------------------|-------------|-----------|---|--|
|                  |                                  |                  |             |           |   |  |
| Submission of pl | hoto of plot is en               | couraged.        | PLEASE      | REFE      | ER TO APPENDIX B, PHO                                   | TO #25   |
| DEPTH            | HORIZON                          | MATRIX           | COLOR       |           | EDOXIMORPHIC FEATURES color, abundance, size, contrast) | COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.) |
| 1-0"             | 0                                |                  |             |           |   |  |
| 0-5"             | A                                | 10Y              | R3/1        |           | 10YR3/4, 10, 1-2, d                                     | loam, blocky   |
| 5-10"            | В                                | 10Y              | R4/3        |           | Indist. mottles   | silty loam, blocky   |
| 10-20"           |                                  | Mixed cold       | ors as des  | cribed:   | for 0-10"   | disturbed?   |
| 20"+             |                                  | 2.5              | Y4/1        |           |   | loam   |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
|                  |                                  |                  |             |           |   |  |
| HYDRIC SOIL      | INDICATOR(S                      | s):              | Q I         |           | REFERENCE(S):   |  |
|                  | 998) indicators<br>we been somew |                  |             |           | s   |  |
|                  |                                  | Mannad Me        | A           |           |   |  |
| OPTIONAL S       | OIL DATA                         | Mapped Mi        | IIA         |           | REFERENCE(S):   |  |
| Taxonomic sub    | group:                           |                  |             |           | BEEFER TO VE  |  |
| Soil drainage cl | ass:                             |                  |             |           |   |  |
| Depth to active  | water table:                     |                  |             |           |   |  |
| NTCHS hydric     | soil criterion:                  |                  |             |           |   |  |
| CONCLU           | ISIONS                           |                  |             | -         |   |  |
|                  |                                  |                  | YES         | No        | REMARKS:  |  |
| Hydric veget     | ation met?                       |                  | $\boxtimes$ |           |   |  |
| Wetland hyd      | rology met?                      |                  |             |           |   |  |
| Hydric soils     | criterion met?                   |                  | $\boxtimes$ |           | See above.  |  |
|                  | APOINT IN A W                    |                  | $\boxtimes$ | П         |   |  |

PROJECT TITLE: NAVSTA NEWPORT WETLAND DELINEATION TRANSECT: N/A PLOT: CP-(P)-02

APPENDIX B
SITE PHOTOGRAPHS





Photo #1. GB-(P)-01. Wetland; frame of reference is viewing south from plot. Captured on Nov. 13, 2002.



Photo #2. GB-(P)-02. Upland; frame of reference is viewing north from plot. Captured on Nov. 14, 2002.



Photo #3. GB-(P)-03. Wetlands; frame of reference is viewing north-northwest from plot. Captured on Nov. 14, 2002.



Photo #4. GB-(P)-04. Upland; frame of reference is viewing west-southwest form plot. Captured on Nov. 14, 2002.



Photo #5. GB-(P)-05. .Wetland, frame of reference is viewing east and from GBe-WET-06. Captured on Nov.14, 2002.



Photo #6. GB-(P)-06. Upland; frame of reference is viewing south at plot. Captured on Nov. 14, 2002.



Photo #7. TF5c-(P)-01 and -02. Wetland (no upland photo taken); frame of reference is viewing into wetlands from boundary at plot (foreground). Captured on Oct. 19, 2002.



Photo #8. TF5c-(P)-03. Wetland; frame of reference is viewing northwest from TF5c-CM-02. Captured on Oct. 19, 2002.



Photo #9. TF5c-(P)-04 and -05. Wetlands (no upland photo taken); frame of reference is viewing north from TF5c-EC2-04. Captured on Oct. 19, 2002.



Photo #10. TF4c-(P)-01 and -02. Wetland (no upland photo taken); frame of reference is viewing east. Captured on Nov. 14, 2002.



Photo #11. TF4c-(P)-03 and -04. Wetland (no upland photo taken); frame of reference is viewing south-south west from TF4c-WET-29. Captured on Nov. 14, 2002.

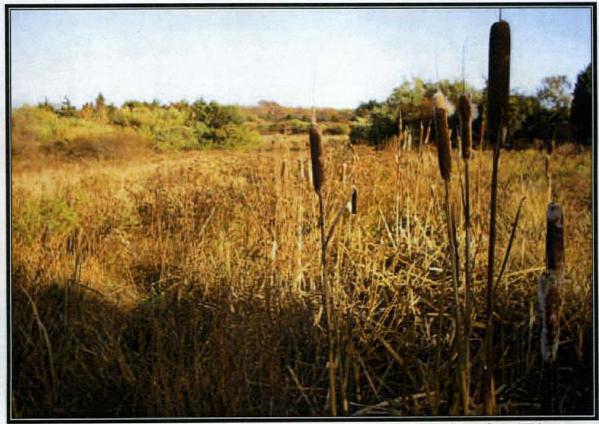


Photo #12. TF4c-(P)-05. Wetland; frame of reference is viewing east-northeast from TF4c-WET-13. Captured on Nov. 14, 2002.



Photo #13. TF4n-(P)-02. Upland; frame of reference is viewing south from plot. Captured on Nov. 12, 2002.



Photo #14. TF4n-(P)-03. Wetland; frame of reference is viewing north from plot. Captured on Nov. 12, 2002.



Photo #15. TF4n-(P)-04. Wetland; frame of reference is viewing west from plot. Captured on Nov. 12, 2002.



Photo #16. TF4n-(P)-05. Upland; frame of reference is viewing east from plot. Captured on Nov. 12, 2002.



Photo #17. TF4n-(P)-06. Wetland; frame of reference is viewing north-northeast from plot. Captured on Nov. 12, 2002.



Photo #18. TF4n-(P)-07. Upland; frame of reference is viewing south-southwest from plot. Captured on Nov. 12, 2002.



Photo #19. TF4n-(P)-10. Wetland; frame of reference is viewing south from plot. Captured on Nov. 12, 2002.



Photo #20. TF4n-(P)-11. Upland; frame of reference is viewing northwest from plot. Captured on Nov. 12, 2002.



Photo #21. LB-(P)-01 and -02. Wetland (no upland photo taken); frame of reference is viewing east-southeast from plot. Captured on Nov. 13, 2002.



Photo #22. LB-(P)-03. Upland; frame of reference is viewing southwest from plot. Captured on Nov. 13, 2002.



Photo #23. LB-(P)-04. Wetland; frame of reference is viewing north from plot. Captured on Nov. 13, 2002.

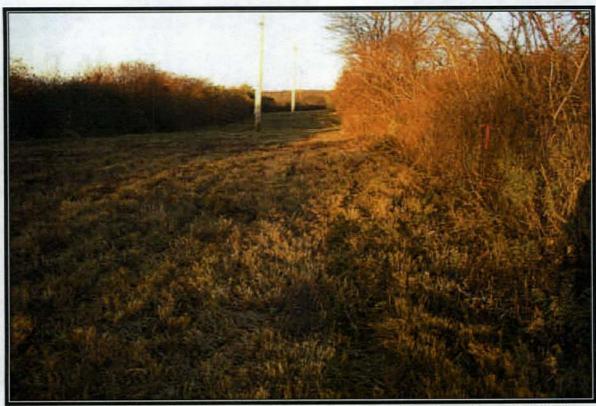
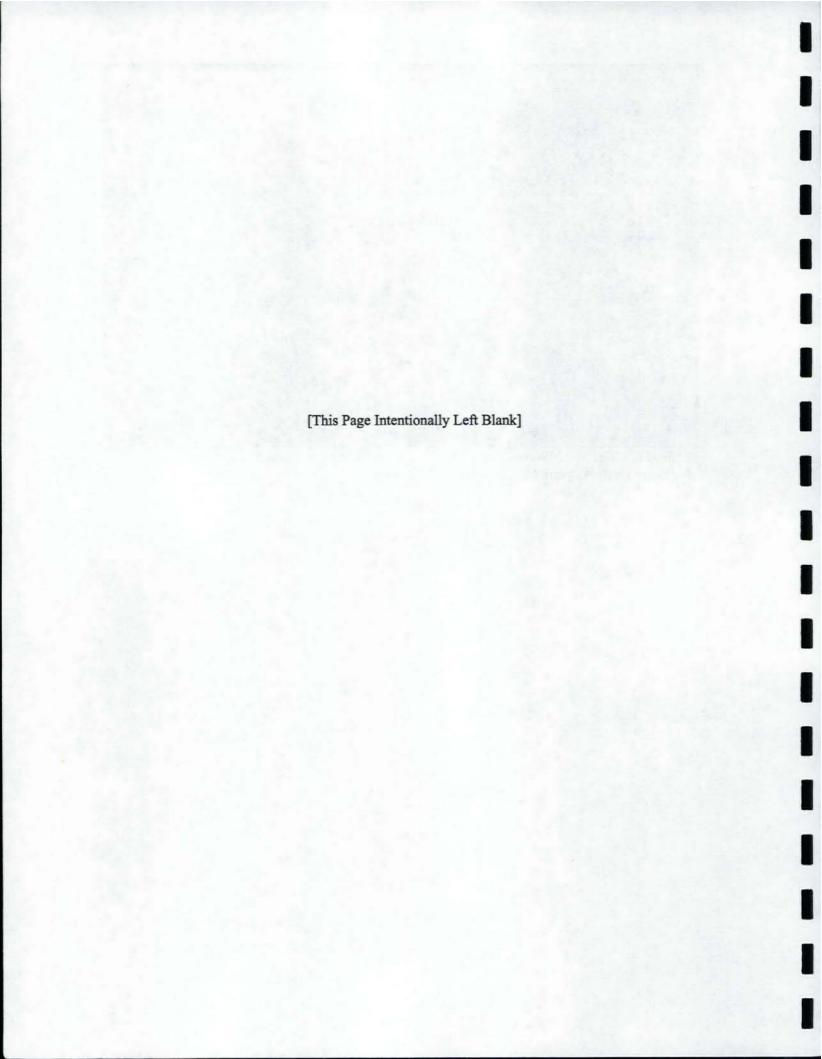


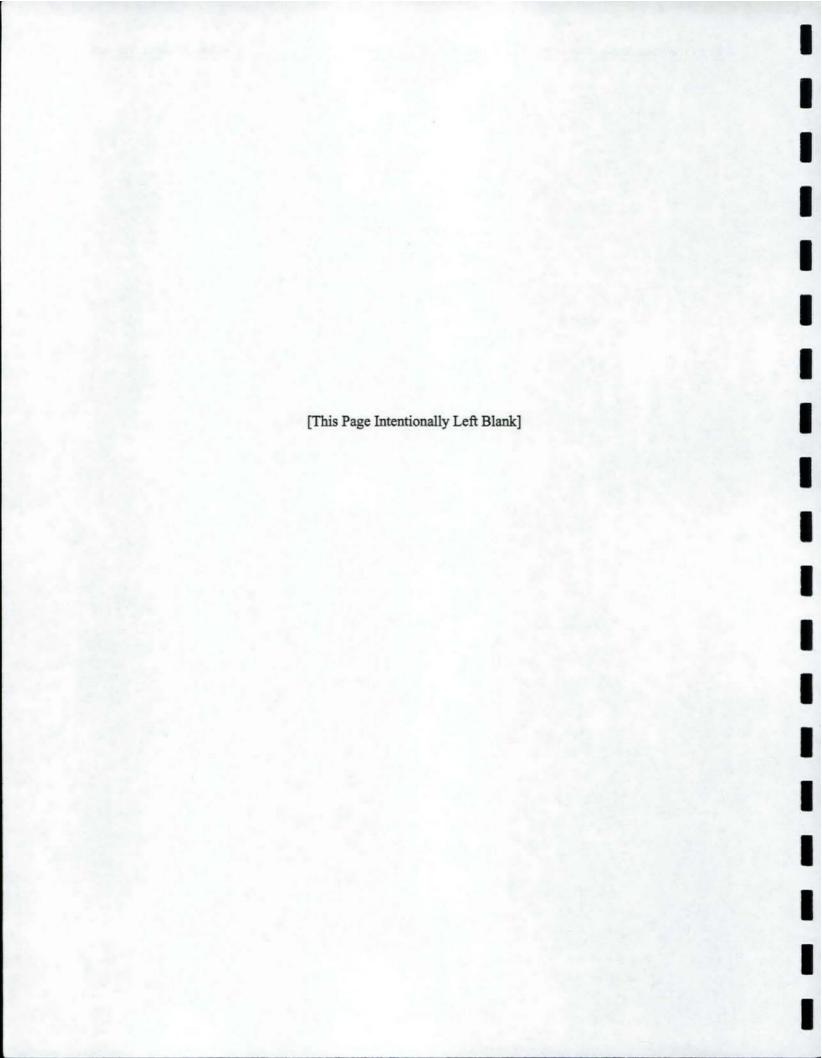
Photo #24. CP-(P)-01. Upland; frame of reference is viewing north-northeast from CP-WET1-10. Captured on Nov. 14, 2002.



Photo #25. CP-(P)-02. Wetland; frame of reference is viewing south-southwest from plot(foreground). Captured on Nov. 14, 2002.



APPENDIX C
DRAINAGE WIDTHS



## APPENDIX C. AVERAGE WIDTHS FOR WATERS OF THE U.S., TANK FARMS 3, 4, AND 5, NAVSTA NEWPORT, RI

| WATERS ID    | SEGMENT REFERENCE                                | AVERAGE WIDTH | FIGURE#       |
|--------------|--|---------------|---------------|
|              | GB-WUS1-01 to GB-WUS1-06                         | 6 feet        | Fig. 4-1      |
| GB-WATER-1   | GB-WUS1-07 to GB-WUS1-13                         | 4 feet        | Fig. 4-1      |
|              | GB-WUS1-13 to GB-WUS1-17                         | 5 feet        | Fig. 4-1      |
|              | GB-WUS1-18 to GB-WUS1-23                         | 7 feet        | Fig. 4-1      |
| GB-WATER-2   | GB-WUS2-01 to GB-WUS2-02                         | 3 feet        | Fig. 4-1      |
|              | GB-WUS2-03 to GB-WUS-04                          | 3 feet        | Fig. 4-1      |
| GB-WATER-3   | GB-WUS3-01 to GB-WUS3-07                         | 3 feet        | Fig. 4-1      |
| NB-WATER-1   | NB-WUS1-01 to NB-WUS1-11                         | 8 feet        | Fig. 4-2      |
|              | NB-WUS1-11 to NB-WUS1-23                         | 11 feet       | Fig. 4-2      |
| NB-WATER-2   | NB-WUS2-01 to NB-WUS2-05                         | 4 feet        | Fig. 4-2      |
| NB-WATER-3   | NB-WUS3-01 to NB-WUS3-21                         | 4 feet        | Fig. 4-2, 4-3 |
| NB-WATER-4   | NB-WUS4-01 to NB-WUS4-04                         | 3 feet        | Fig. 4-2      |
| TF4n-WATER-1 | TF4n-WUS1-01 to TF4n-WUS2-05                     | 3 feet        | Fig. 4-4      |
| TF4n-WATER-2 | Estimated alignment, no data points <sup>1</sup> | 2 feet        | Fig. 4-4      |
| LB-WATER-12  | N/A  | N/A           | Fig. 4-5      |

Notes: <sup>1</sup> An estimate was made in the field of its approximate distance from Defense Highway and its point of intersection with the road. Base layer for road network was used as reference to create this alignment.

<sup>&</sup>lt;sup>2</sup> Please refer to Section 4.2.6 and note on figure for a explanation of Lawton Brook.